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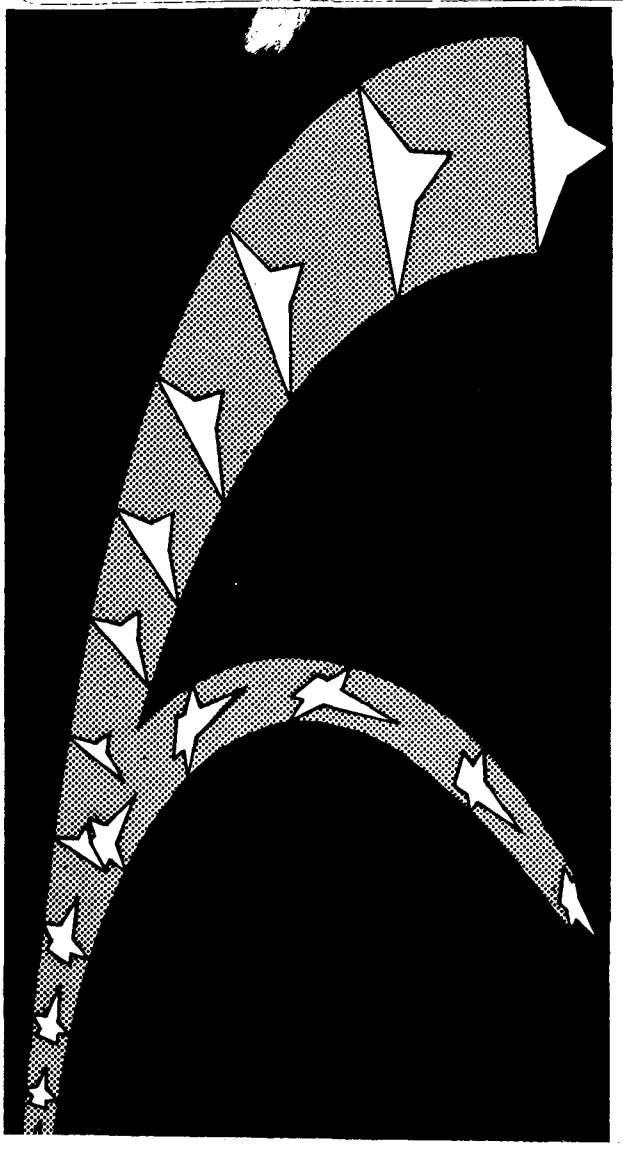

—SPACE SHUTTLE—

EFFECT OF ORBITER/BOOSTER PROXIMITY INTERFERENCES ON THE AERODYNAMIC CHARACTERISTICS OF THE LAUNCH CONFIGURATION DURING SEPARATION OR ABORT MANEUVERS M=0.6 – 1.38

by

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LTV HIGH SPEED WIND TUNNEL

MANNED SPACECRAFT CENTER

FACILITY FORM 602

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SADSAC SPACE SHUTTLE
AEROTHERMODYNAMIC
DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016
MARSHALL SPACE FLIGHT CENTER

SPACE DIVISION CHRYSLER CORPORATION

NASA

NOV 1971
RECEIVED
NASA STI FACILITY
INPUT BRANCH

SADSAC/SPACE SHUTTLE

WIND TUNNEL TEST DATA REPORT

CONFIGURATION: MSC Launch Configuration SL-13A (S-13A/SB-13A), 0.0088105 Scale

TEST PURPOSE: Define the effects of orbiter/booster proximity interference on the aerodynamic characteristics of the launch configuration during separation or abort maneuvers. Test hours 60.69

TEST FACILITY: LTV 4-Foot High Speed Wind Tunnel

TESTING AGENCY: NASA Manned Spacecraft Center

TEST NO. & DATE: MSC Test Series S-XXX, January 21, 1971

MACH NUMBERS: 0.6, 0.9, 1.1, 1.38

FACILITY COORDINATOR: Ray Nelson - NASA/MSC

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CONTRACT NAS 8-4016 AMENDMENT 151 DRL 184 - 58

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ABSTRACT

The transonic phase of the 0.0088105-scale MSC Orbiter/Booster separation test (MSC Test Series S-XXX) was conducted during January, 1971, in the LTV 4-foot High Speed Wind Tunnel, Dallas, Texas, at Mach numbers of 0.6, 0.9, 1.1, and 1.38. The purpose of this test was to define the effects of the Orbiter/Booster proximity interference on the aerodynamic characteristics of the launch configuration during separation or abort maneuvers. Each model had both straight and delta wings available for variation of launch vehicle configuration concepts.

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TABLE OF CONTENTS

	PAGE NUMBER
LIST OF FIGURES	2
LIST OF TABLES	3
SUMMARY	4
CONFIGURATIONS INVESTIGATED	5
DATASET COLLATION SHEETS	7
TEST FACILITY DESCRIPTION	13
TEST CONDITIONS	14
DATA REDUCTION	15
SUMMARY DATA PLOT INDEX	19
FIGURES	24
MODEL COMPONENT DESCRIPTION SHEETS	41
NOMENCLATURE	51
TABULATED DATA LISTING	58
PLOTTED DATA	59

LIST OF FIGURES

FIGURE NUMBER	TITLE	PAGE NUMBER
1.	Axis System	24
2.	$B_{11}W_{11}V_5$ and B_{B3} W_{B6} Installed in Wind Tunnel at Separation Position 4	25
3.	$B_{11}W_{11}V_5$ and B_{B3} W_{B6} Installed in Wind Tunnel at Separation Position 13	26
4.	$B_{11}W_{11}V_5$ and B_{B3} W_{B6} Installed in Wind Tunnel at Separation Position 15	27
5.	245 Orbiter Configuration Model S-13A	28
6.	251 Booster Configuration Model SB-13A	34
7.	LTV 4 Foot High Speed Wind Tunnel Dual Support System	40

LIST OF TABLES

TABLE NUMBER	TITLE	PAGE NUMBER
I	Test Conditions	14
II	Separation Position	17
III	Summary of SADSAC Nomenclature	18
IV	Model Component: Body B_{11}	41
V	Model Component: Wing (W_6)	42
VI	Model Component: Wing (W_{11})	43
VII	Model Component: Horizontal Tail (H_{14})	44
VIII	Model Component: Vertical Tail (V_5)	45
IX	Model Component: Body - B_{B3}	46
X	Model Component: Wing (W_{B1})	47
XI	Model Component: Wing (W_{B6})	48
XII	Model Component: Horizontal Tail (H_{B1})	49
XIII	Model Component: Vertical Tail (V_{B1})	50

SUMMARY

The transonic phase of the 0.0088105-scale MSC Orbiter/Booster separation test (MSC Test Series S-XXX) was conducted during January, 1971, in the LTV 4-foot High Speed Wind Tunnel, Dallas, Texas, at Mach Numbers of 0.6, 0.9, 1.1, and 1.38. The purpose of this test was to define the effects of the Orbiter/Booster proximity interference on the aerodynamic characteristics of the launch configuration during separation or abort maneuvers. Each model had both straight and delta wings available for variation of launch vehicle configuration concepts.

CONFIGURATIONS INVESTIGATED

The models for this test were constructed of aluminum and 17-4 PH stainless steel to facilitate component buildup testing. All control surfaces were constructed with zero deflection with no provisions for varying the deflection of these surfaces.

NOMENCLATURE

MSC Orbiter (S-13A) 0.0088105 Scale

- B11 = fuselage
- W6 = straight wing
- W11 = delta wing
- H14 = horizontal tail
- V5 = vertical tail

MSC Booster (SB-13A) 0.0088105 Scale

- BB3 = fuselage
- WB1 = straight wing
- WB6 = delta wing
- HB1 = horizontal tail for straight wing configuration
- VB1 = vertical tail for straight wing configuration

Additional information on the above components is presented on the component sheets, pages 41 through 50, and figures, pages 24 through 40.

CONFIGURATIONS INVESTIGATED

(Continued)

COMBINATIONS TESTED

Orbiter	Booster
B11W6H14V5	BB3WB6
B11W11	BB3WB1HB1
B11W11V5	BB3WB6VB1

TEST S-XXX DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	Orbiter α	Orbiter β	Booster α	Booster β	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCV 001	$B_{11}W_{11}V_5$		A	0°			0.9																
RCV 002	↓		0°	B			0.9																3
RCV 003			A	0°			1.1																4
RCV 004			0°	B			1.1																1
RCV 005		$B_{B3}W_{B6}$	A	0°	0°	0°	1.1	14	15	16	11	12	13	5	6	7	8	9	10				2
RCV 006		↓	↓	↓	↓	↓	0.9	17	18	19	20	21	22	23	24	25	26	27	28				
RCV 007		$B_{B3}W_{B6}V_{B1}$	0°	B			0.9			29	30		31		32	33			34				
RCV 008		↓	↓	↓	↓		1.1			38	39		40		35	36			37				
RCV 009						5°	1.1			41	42		43		44	45			46				
RCV 010		↓	↓	↓	↓	↓	0.9			50	51		52		47	48			49				
RCV 011		$B_{B3}W_{B6}$	A	0°	4°	0°	0.9				53	54	55	56	57	58	59	60	61				
RCV 012		↓	↓	↓	↓	↓	1.1				68	69	70	65	66	67	62	63	64				
RCV 013					-5°		1.1				71	72	73	74	75	76	77	78	79				
RCV 014					↓		0.9				86	87	88	83	84	85	80	81	82				
RCV 015	↓	↓	↓	↓	↓	↓	0.6				89	90	91	205	206	207	208	209	210				
RCV 016	$B_{11}W_{11}$		0°	B			0.9																92
RCV 017	↓		↓	↓			1.1																93
RCV 018	$B_{11}W_{11}V_5$	$B_{B3}W_{B6}$	0°	0°	0°	0°	1.1													106	107	108	
RCV 019	↓	↓	↓	↓	↓	↓	0.9													109	110	111	
RCV 020	↓	↓	-5°	↓	-5°	↓	0.9													100	101	102	

1 7 13 19 25 31 37 43 49 55 61 67 73

CA CY CN CBL CLM CYN CPC CPB SEPPOS 8

COEFFICIENTS: α or β

IDEVAR(1) IDEVAR(2)

SCHEDULES A = ±10° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

B = ±6° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

TEST S-XXX DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	ORBITER α	ORBITER β	BOOSTER α	BOOSTER β	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCV 021	$B_{11} W_{11} V_5$	$B_{B3} W_{B6}$	-5°	0°	-5°	0°	1.1													103	104	105	
RCV 022			4°		4°		1.1													94	95	96	
RCV 023			↓		↓		0.9													97	98	99	
RCV 024			0°		0°		1.38													112	113	114	
RCV 025			4°		4°															115	116	117	
RCV 026		↓	-5°		-5°															118	119	120	
RCV 027		$B_{B3} W_{B6}$	A		↓						121	122	123	124	125	126	127	128	129				
RCV 028		↓	↓		0°	↓		139	140	141	136	137	138	133	134	135	130	131	132				
RCV 029			↓	↓	⋮	⋮																	142
RCV 030	↓		0°	B	⋮	⋮																	143
RCV 031	$B_{11} W_{11}$		↓	↓	↓	↓																	144
RCV 032	$B_{11} W_{11} V_5$	$B_{B3} W_{B6} V_{B1}$	↓	↓	0°	0°				145	146		147		148	149			150				
RCV 033		↓	↓	↓	↓	5°				154	155		156		151	152			153				
RCV 034		$B_{B3} W_{B6}$	A	0°	4°	0°					157	158	159	160	161	162	163	164	165				
RCV 035			-5°	↓	-5°	↓	↓													166	167	168	
RCV 036			↓	↓	↓	↓	0.6													169	170	171	
RCV 037			4°	↓	4°	↓	↓													172	173	174	
RCV 038			0°	↓	0°	↓	↓													175	176	177	
RCV 039		↓	A	↓	↓	↓	↓	178	179	180	187	188	189	184	185	186	181	182	183				
RCV 040	↓		↓	↓			↓																190

1 7 13 19 25 31 37 43 49 55 61 67 73 76

CA CY CN CBL CLM CYN CPC CPB SEPPOS 8

COEFFICIENTS: α or β → IDVAR(1) IDVAR(2) NPV

SCHEDULE: A = ±10° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)
B = ±6° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

TEST S-XXX DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	Orbiter α	Orbiter β	Booster α	Booster β	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCU 041	$B_{11} W_{11} V_5$		0°	B			0.6																191
RCU 042	$B_{11} W_{11}$		↓	↓			↓																192
RCU 043	$B_{11} W_{11} V_5$	$B_{B3} W_{B6} V_{B1}$			0°	0°				193	194		195		196	197			198				
RCU 044	↓	↓			↓	5°	↓			202	203		204		199	200			201				
RCU 045	↓	$B_{B3} W_{B6}$	A	0°	4°	0°	0.6				217	218	219	214	215	216	211	212	213				
RCU 046	$B_{11} W_6 H_{14} V_5$	$B_{B3} W_{B1} H_{B1}$	A	0°	0°	0°	0.6							220	221	222							

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CA CY CN CBL CLM CYN CPC CPB SEPPOS 0

COEFFICIENTS: α or β → IDFVAR(1) IDFVAR(2) MIN

SCHEDULES A = ± 10° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)
B = ± 6° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

TEST S-XXX DATA SET COLLATION SHEET

10

☐ PRETEST

☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	ORBITER α	ORBITER β	BOOSTER α	BOOSTER β	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCV 047	$B_{11}W_{11}V_5$	$B_{B3}W_{B6}$	A	0°	0°	0°	1.1	514	515	516	511	512	513	505	506	507	508	509	510				
RCV 048	↓	↓	↓	↓	↓	↓	0.9	517	518	519	520	521	522	523	524	525	526	527	528				
RCV 049		$B_{B3}W_{B6}V_{B1}$	0°	B		↓	0.9			529	530		531		532	533			534				
RCV 050		↓	↓	↓			1.1			538	539		540		535	536			537				
RCV 051						5°	1.1			541	542		543		544	545			546				
RCV 052		↓	↓	↓	↓	↓	0.9			550	551		552		547	548			549				
RCV 053		$B_{B3}W_{B6}$	A	0°	4°	0°	0.9				553	554	555	556	557	558	559	560	561				
RCV 054		↓	↓	↓	↓	↓	1.1				568	569	570	565	566	567	562	563	564				
RCV 055					-5°		1.1				571	572	573	574	575	576	577	578	579				
RCV 056					↓		0.9				586	587	588	583	584	585	580	581	582				
RCV 057			↓				0.6				589	590	591	705	706	707	708	709	710				
RCV 058			0°		0°		1.1													606	607	608	
RCV 059			↓		↓		0.9													609	610	611	
RCV 060			-5°		-5°		0.9													600	601	602	
RCV 061			↓		↓		1.1													603	604	605	
RCV 062			4°		4°		1.1													594	595	596	
RCV 063			↓		↓		0.9													597	598	599	
RCV 064			0°		0°		1.38													612	613	614	
RCV 065			4°		4°		↓													615	616	617	
RCV 066	↓	↓	-5°	↓	-5°	↓	↓													618	619	620	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CA CY CN CBL CLM CYN CPC CPB SEPPOS 8

COEFFICIENTS: α or A

IDFVAR(1) IDFVAR(2) NDV

SCHEDULES A = ±16° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

B = ±6° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

TEST S-XXX DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	ORBITER α	ORBITER β	BOOSTER α	BOOSTER β	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCV 067	$B_{11}W_{11}V_5$	$B_{B3}W_{B6}$	A	0°	-5°	0°	1.38				621	622	623	624	625	626	627	628	629				
RCV 068	↓	↓	↓	↓	0°	↓	↓	639	640	641	636	637	638	633	634	635	630	631	632				
RCV 069	↓	$B_{B3}W_{B6}V_{B1}$	0°	B	↓	↓				645	646		647		648	649			650				
RCV 070	↓	↓	↓	↓	↓	5°				654	655		656		651	652			653				
RCV 071	↓	$B_{B3}W_{B6}$	A	0°	4°	0°					657	658	659	660	661	662	663	664	665				
RCV 072	↓	↓	-5°	↓	-5°	↓	↓													666	667	668	
RCV 073	↓	↓	↓	↓	↓	↓	0.6													669	670	671	
RCV 074	↓	↓	4°	↓	4°	↓	↓													672	673	674	
RCV 075	↓	↓	0°	↓	0°	↓	↓													675	676	677	
RCV 076	↓	↓	A	↓	↓	↓	↓	678	679	680	687	688	689	684	685	686	681	682	683				
RCV 077	↓	$B_{B3}W_{B6}V_{B1}$	0°	B	↓	↓	↓			693	694		695		696	697			698				
RCV 078	↓	↓	↓	↓	↓	5°	↓			702	703		704		699	700			701				
RCV 079	↓	$B_{B3}W_{B6}$	A	0°	4°	0°	↓				717	718	719	714	715	716	711	712	713				
RCV 080	OFF	↓			0°	↓	↓																723
RCV 081	↓	↓			↓	↓	0.9																724
RCV 082	↓	↓			↓	↓	1.1																725
RCV 083	↓	$B_{B3}W_{B6}V_{B1}$			↓	↓	1.1																726
RCV 084	↓	↓			↓	↓	0.9																727
RCV 085	↓	↓			↓	↓	0.6																728
RCV 086	↓	↓			↓	5°	↓																729

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CA CY CN CBL CLM CYN CPC CPB SEPPOS 8

COEFFICIENTS: α or β → IDPVAR(1) IDPVAR(2) NDV

SCHEDULES A = ±10° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)
B = ±6° (DATA AT SMALL INCREMENTS - NOT CONSTANT FOR EACH RUN)

TEST S-XXX DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION ORBITER	CONFIGURATION BOOSTER	Canard α	Canard δ	Aileron α	Aileron δ	MACH NO.	SEPARATION POSITIONS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
RCV 087	OFF	$B_{B3}W_{B6}V_{B1}$			0°	5°	0.9																
RCV 088	↓	↓			↓	↓	1.1																730
RCV 089		$B_{B3}W_{B6}$					1.1																731
RCV 090							0.9																732
RCV 091							0.6																733
RCV 092					-5°	0°	0.6																734
RCV 093					↓	↓	0.9																735
RCV 094							1.1																736
RCV 095					4°		1.1																737
RCV 096					↓		0.9																738
RCV 097							0.6																739
RCV 098							1.38																740
RCV 099		↓			-5°		↓																741
RCV 100		$B_{B3}W_{B6}V_{B1}$			0°																		742
RCV 101		$B_{B3}W_{B6}$			↓	↓																	743
RCV 102		↓				5°																	744
RCV 103	↓	$B_{B3}W_{B6}V_{B1}$			↓	5°	↓																745
RCV 104	$B_{11}W_6H_{18}V_5$	$B_{B3}W_{B1}H_{B1}$	A	0°	0°	0°	0.6							TRD	721	722							746

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CA CY CN CBL CLM CYN CPC CPB SEPPDS 8

COMMENTS: < or >

SCHEDULING

IDEVAR(1) IDEVAR(2) NEV

TEST FACILITY DESCRIPTION

The LTV Aeronautics Division High Speed Wind Tunnel is an atmospheric exhaust, blow down tunnel with a 4- x 4-foot test section size. The Mach number range of the tunnel is from 0.5 to 5.0. Air is stored in six tanks, with a total volume of twenty-eight thousand cubic feet, at a maximum pressure of 600 psia and a nominal temperature of 100 degrees Fahrenheit.

The circuit utilizes both supersonic and transonic test sections, each 4- x 4-foot in cross section and slightly over five feet long. For supersonic operation a single-peak variable diffuser is placed downstream of the supersonic test section. For transonic operation the variable diffuser is removed from the circuit and replaced with a porous wall, transonic test section with 22 percent wall porosity. The transonic plenum is pumped by ejector action of the main tunnel airstream acting on controllable ejector flaps located downstream of the test section. Adjustable chocking flaps, also located downstream of the test section, are utilized for subsonic Mach number adjustment.

TABLE I.

TEST CONDITIONS
TEST S-XXX

MACH NUMBER	REYNOLDS NUMBER per ~~unit~~ ~~length~~ FOOT	DYNAMIC PRESSURE (pounds/sq. ~~inch~~ FOOT)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	6.0×10^6 /FT	700 PSF	100
0.9	6.7×10^6 /FT	1135 PSF	100
1.1	7.0×10^6 /FT	1340 PSF	100
1.38	8.0×10^6 /FT	1650 PSF	100

BALANCE UTILIZED: LTV VB-17 AND VB-34, SIX COMPONENT

CAPACITY:

	VB-17	VB-34	
NF	750	1800	LB.
SF	400	1800	LB.
AF	250	300	LB.
PM	1000	2250	IN-LB
YM	650	2250	IN-LB
RM	500	1250	IN-LB

ACCURACY:

VB-17	VB-34	
1.24	1.62	LB
0.36	0.41	LB
0.14	0.11	LB
3.16	4.88	IN-LB
0.86	1.24	IN-LB
0.63	0.37	IN-LB

COEFFICIENT TOLERANCE:

COMMENTS:

DATA REDUCTION

Two internal strain gauge balances were utilized for this test; one in the orbiter and one in the booster. The measured data were reduced to coefficient form relative to the body axis system according to the wing configuration tested and the test run objective (orbiter or booster measured data). Listed below are the data set identifiers and the applicable dimensional data utilized to reduce the measured data to coefficient form:

Data Identifiers	Applicable Wing	S_{ref} (wing planform area, in.^{2})	l_{ref} (wing mean aerodynamic chord, in.)	b_{ref} (wing equivalent span, in.)
RCU046	W6 (Orbiter	20.664	1.854	12.0
RCU001 through RCU045	W11 (Orbiter)	74.75	9.882	8.875
RCU104	WB1 (Booster)	54.65	2.992	19.7
RCU047 through RCU103	WB6	106.846	9.54	13.374

The moment reference point (MRP) for the orbiter is 9.388 inches aft of the orbiter nose, on the lateral centerline, and 1.46 inches above the bottom of the orbiter fuselage. The MRP for the booster is 15.899 inches aft of the nose, on the lateral centerline, and 2.0 inches above the bottom of the booster fuselage.

The separation positions listed in TableII are referenced to the orbiter and booster moment reference points and to the wind axis system unless otherwise

specified. The ΔX and ΔZ positions as listed in TableII were held constant during a test run by utilization of a servo mechanism system. For example, during an orbiter pitch or yaw sweep the booster was positioned to maintain a constant separation distance between the moment reference points of the orbiter and booster. The ΔY distance (lateral distance) between the orbiter and booster was always maintained at a constant value of zero.

Data for this test are referenced to orbiter angle of attack or angle of sideslip except for those test runs where the booster was tested alone. For example, on data set RCU047, force data were measured for the booster, but the booster was fixed at zero angle of attack and zero sideslip angle and the orbiter was pitched through an angle of attack range of -10^{o} to 10^{o} at a fixed sideslip angle of zero.

Data submitted into SADSAC were the six basic body axis system coefficients (CA, CY, CN, CBL, CLM, CYN,) and CPB and CPC. CPB is a base pressure coefficient and CPC is the balance cavity pressure coefficient.

TABLE II . - SEPARATION POSITIONS

POSITION NO.	TUNNEL COORDINATES ΔX, in	ΔZ, in	NONDIMENSIONAL COORDINATES $\Delta X/\ell_B$	$\Delta Z/\ell_B$
1	6.001	4.002	.2642	.1762
2	8.999	4.002	.3962	.1762
3	11.999	4.002	.5283	.1762
4	6.001	6.001	.2642	.2642
5	8.999	6.001	.3962	.2642
6	11.999	6.001	.5283	.2642
7	6.001	8.999	.2642	.3962
8	8.999	8.999	.3952	.3962
9	14.000	8.999	.6164	.3962
10	6.001	11.000	.2642	.4843
11	8.999	11.000	.3962	.4843
12	14.000	11.000	.6164	.4843
13	3.000	3.4	.1321	.1497
14	6.001	3.4	.2642	.1497
15	8.999	3.4	.3962	.1497
16	Freestream		Freestream	

NOTE: Postions No. 13, 14, and 15 are Orbiter/Booster mated positions with ΔX and ΔZ measured relative to the booster body axis. All other positions are measured in the wind axis.

ℓ_B is the booster body length (Model = 22.713 in.)

Separation positions are measured relative to the orbiter and booster balance center of gravity locations.

TABLE III. SUMMARY OF SADSAC NOMENCLATURE - AERODYNAMIC FORCE AND MOMENT COEFFICIENTS

COEFFICIENT	COEFFICIENT NAME	SADSAC NOMENCLATURE		
		BODY AXIS	STABILITY AXIS	WIND AXIS
C_A	Total Axial Force	CA	-	-
C_{AB}	Base Axial Force	CAB	--	-
C_{AF}	Forebody Axial Force	CAF	-	-
C_D	Total Drag Force	-	CD	CDTOTL
C_{DB}	Base Drag Force	-	CDB	CDBASE
C_{DF}	Forebody Drag Force	-	CDF	CDFORE
C_L	Lift Force	-	CL	CL
C_N	Normal Force	CN	-	-
C_Y	Side Force	CY	CY	CC
C_ℓ	Rolling Moment	CBL	CSL	CWL
C_m	Pitching Moment	CLM	CLM	CPM
C_n	Yawing Moment	CYN	CLN	CLN
L/D	Lift-To-Drag Force Ratio	-	L/D	CL/CD
L/D	Lift-To-Forebody Drag Force Ratio	-	L/DF	CL/CDF
N/A	Normal-To-Axial Force Ratio	N/A	-	-
N/A	Normal-To-Forebody Axial Force Ratio	CN/CAF	-	-

SUMMARY DATA PLOT INDEX

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS FIXED	CONDITIONS VARYING	PAGES
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.6, ALPB=0	Separation Distance	1-12
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.6, ALPB=-5	Separation Distance	12-21
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.6, ALPB=4	Separation Distance	22-30
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.9, ALPB=0	Separation Distance	31-42
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.9, ALPB=-5	Separation Distance	43-51
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=.9, ALPB=4	Separation Distance	52-60
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.1, ALPB=0	Separation Distance	61-72
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.1, ALPB=-5	Separation Distance	73-81
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.1, ALPB=4	Separation Distance	82-90
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.38, ALPB=0	Separation Distance	91-102
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.38, ALPB=-5	Separation Distance	103-111

SUMMARY DATA PLOT INDEX
(CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS FIXED	CONDITIONS VARYING	PAGES
Long. Aero Char. of Orbiter B11W11V5 in the Presence of Booster BB3WB6, Beta = 0	(A)	M=1.38, ALPB=4	Separation Distance	112-120
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=0.6, ALPB=0	Separation Distance	121-132
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=0.6, ALPB=-5	Separation Distance	133-141
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=0.6, ALPB=4	Separation Distance	142-150
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=.9, ALPB=0	Separation Distance	151-162
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=.9, ALPB=-5	Separation Distance	163-171
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=.9, ALPB=4	Separation Distance	172-180
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=1.1, ALPB=0	Separation Distance	181-192
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=1.1, ALPB=-5	Separation Distance	193-201
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=1.1, ALPB=4	Separation Distance	202-210
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=1.38, ALPB=0	Separation Distance	211-222
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5, Beta = 0	(A)	M=1.38, ALPB=-5	Separation Distance	223-231

SUMMARY DATA PLOT INDEX
(CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS FIXED	CONDITIONS VARYING	PAGES
Long. Aero Char. of Booster BB3WB6 in the Presence of Orbiter B11W11V5	(A)	M=1.38,ALPB=4	Separation Distance	232-240
Long. Aero Char. of Orbiter B11W11V5 Outside Presence of a Booster, Beta = 0	(A)	Separation Distance =0.016	Mach	241-243
Long. Aero Char. of Orbiter B11W11V5 Outside Presence of a Booster, Beta = 0	(B)	Separation Distance =0.016	Mach	244-246
Long. Aero Char. of Orbiter B11W11V5 Mated With Boost BB3WB6, Beta = 0	(C)	M = 0.6	ALPHA,ALPB, Separation Distance	247-249
Long. Aero Char. of Orbiter B11W11V5 Mated With Boost BB3WB6, Beta = 0	(C)	M = .9	ALPHA,ALPB, Separation Distance	250-252
Long. Aero Char. of Orbiter B11W11V5 Mated With Boost BB3WB6, Beta = 0	(C)	M = 1.1	ALPHA,ALPB, Separation Distance	253-255
Long. Aero Char. of Orbiter B11W11V5 Mated With Boost BB3WB6, Beta = 0	(C)	M = 1.38	ALPHA,ALPB, Separation Distance	256-258
Long. Aero Char. of Boost BB3WB6 Mated With Orbiter B11W11V5, Beta = 0	(C)	M = .6	ALPHA,ALPB, Separation Distance	259-261
Long. Aero Char. of Boost BB3WB6 Mated With Orbiter B11W11V5, Beta = 0	(C)	M = .9	ALPHA,ALPB, Separation Distance	262-264
Long. Aero Char. of Boost BB3WB6 Mated With Orbiter B11W11V5, Betb = 0	(C)	M = 1.1	ALPHA,ALPB, Separation Distance	265-267
Long. Aero Char. of Boost BB3WB6 Mated With Orbiter B11W11V5, Betb = 0	(C)	M = 1.38	ALPHA,ALPB, Separation Distance	268-270
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, Alpha=ALPB=BETB=0	(D)	M = .6	Separation Distance	271-273

SUMMARY DATA PLOT INDEX
(CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS FIXED	CONDITIONS VARYING	PAGES
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=0	(D)	M = .9	Separation Distance	274-276
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=0	(D)	M = 1.1	Separation Distance	277-279
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=0	(D)	M = 1.38	Separation Distance	280-282
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=5	(D)	M = .6	Separation Distance	283-285
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=5	(D)	M = .9	Separation Distance	286-288
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=5	(D)	M = 1.1	Separation Distance	289-291
Lat/Dirct Char. of Orb. B11W11V5 in Presence of Boost BB3WB6VB1, ALPHA=ALPB=BETB=5	(D)	M = 1.38	Separation Distance	292-294
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=0	(D)	M = .6	Separation Distance	295-297
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=0	(D)	M = .9	Separation Distance	298-300
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=0	(D)	M = 1.1	Separation Distance	301-303
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=0	(D)	M = 1.38	Separation Distance	304-306
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=5	(D)	M = .6	Separation Distance	307-309

SUMMARY DATA PLOT INDEX
(CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS FIXED	CONDITIONS VARYING	PAGES
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=5	(D)	M = .9	Separation Distance	310-312
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=5	(D)	M = 1.1	Separation Distance	313-315
Lat/Dirct Char. of Boost BB3WB6VB1 in Presence of Orb B11W11V5, ALPHA=ALPB=BETB=5	(D)	M = 1.38	Separation Distance	316-318
Effect of Boost Vert. Tail, Lat/Dirct Char. Config. 1=BB3WB6, Config. 2=BB3WB6VB1	(E)	M = .6	Configuration	319-321
Effect of Boost Vert. Tail, Lat/Dirct Char. Config 1=BB3WB6, Config 2=BB3WB6VB1	(E)	M = .9	Configuration	322-324
Effect of Boost Vert. Tail, Lat/Dirct Char. Config 1=BB3WB6, Config 2=BB3WB6VB1	(E)	M = 1.1	Configuration	325-327
Effect of Boost Vert. Tail, Lat/Dirct Char. Config 1=BB3WB6, Config 2=BB3WB6VB1	(E)	M = 1.38	Configuration	328-330

PLOTTED COEFFICIENTS SCHEDULE

(A) CLM, CN, & CA vs. ALPHA

(B) CLM, CN, & CA vs. ALPB

(C) CLM, CN, & CA vs. ALPHA & SEPPOS

(D) CY, CYN & CBL vs. BETA

(E) CY, CYN, CBL vs. BETB

Notes:

1. Positive directions of force coefficients moment coefficients, and angles are indicated by arrows.

2. For clarity, origins of wind and stability axes have been displaced from the center of gravity.

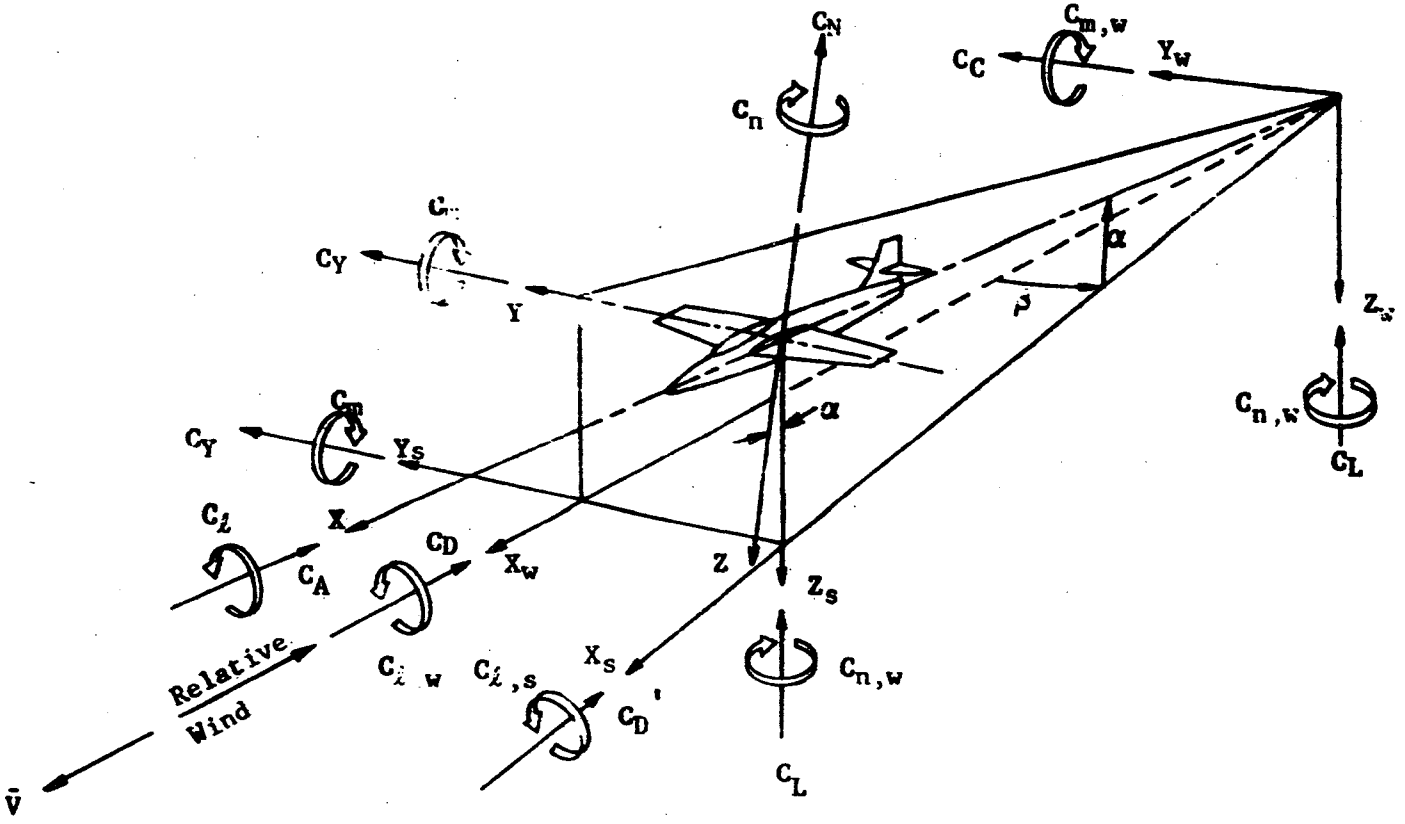


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle

NOT REPRODUCIBLE

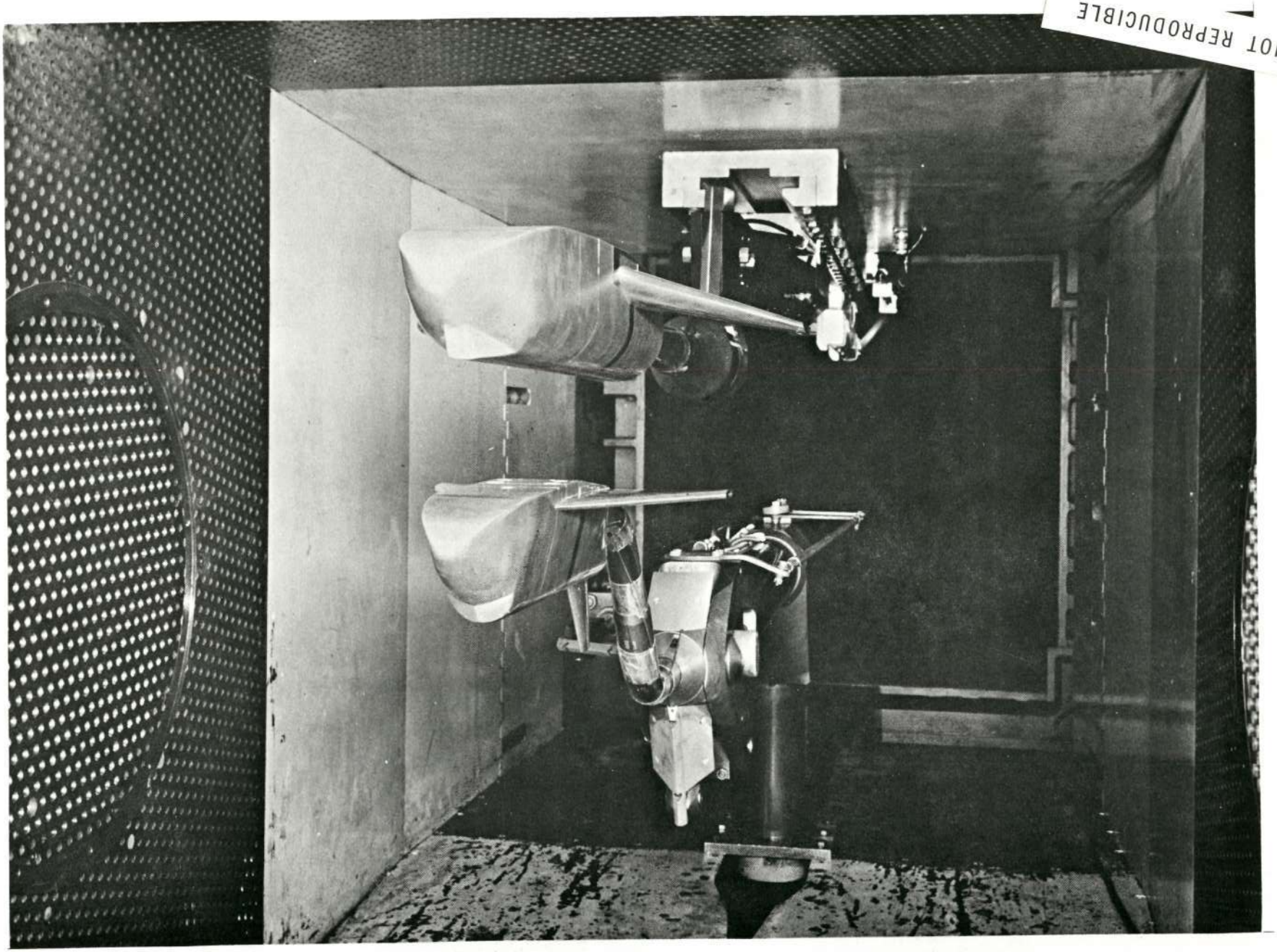


Figure 2.- $B_{11}W_{11}V_5$ and $B_{B3}W_{B6}$ installed in wind tunnel at separation position 4.

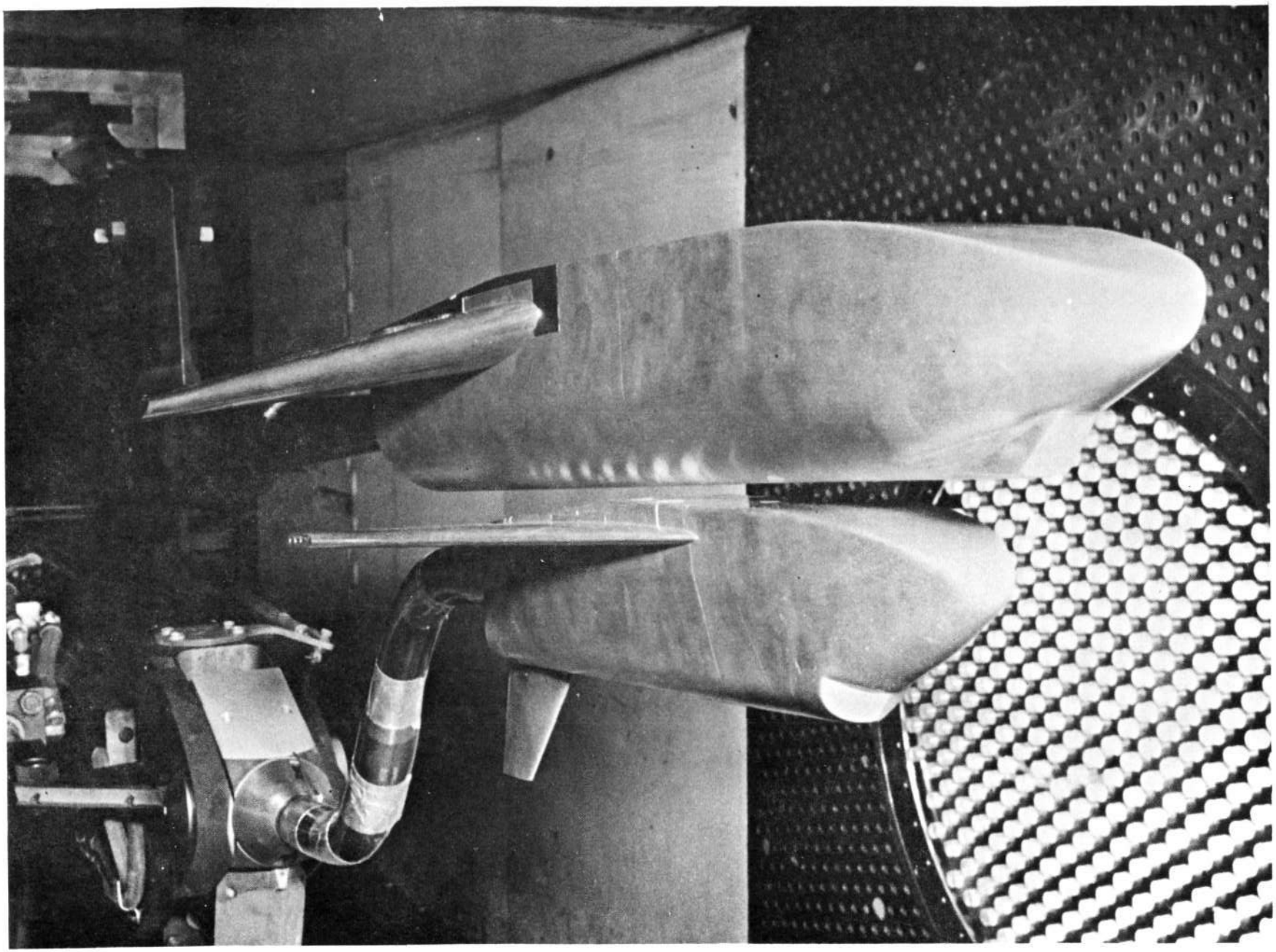


Figure 3. - $B_{11}W_{11}V_5$ and $B_{B3}W_{B6}$ installed in wind tunnel at separation position 13.

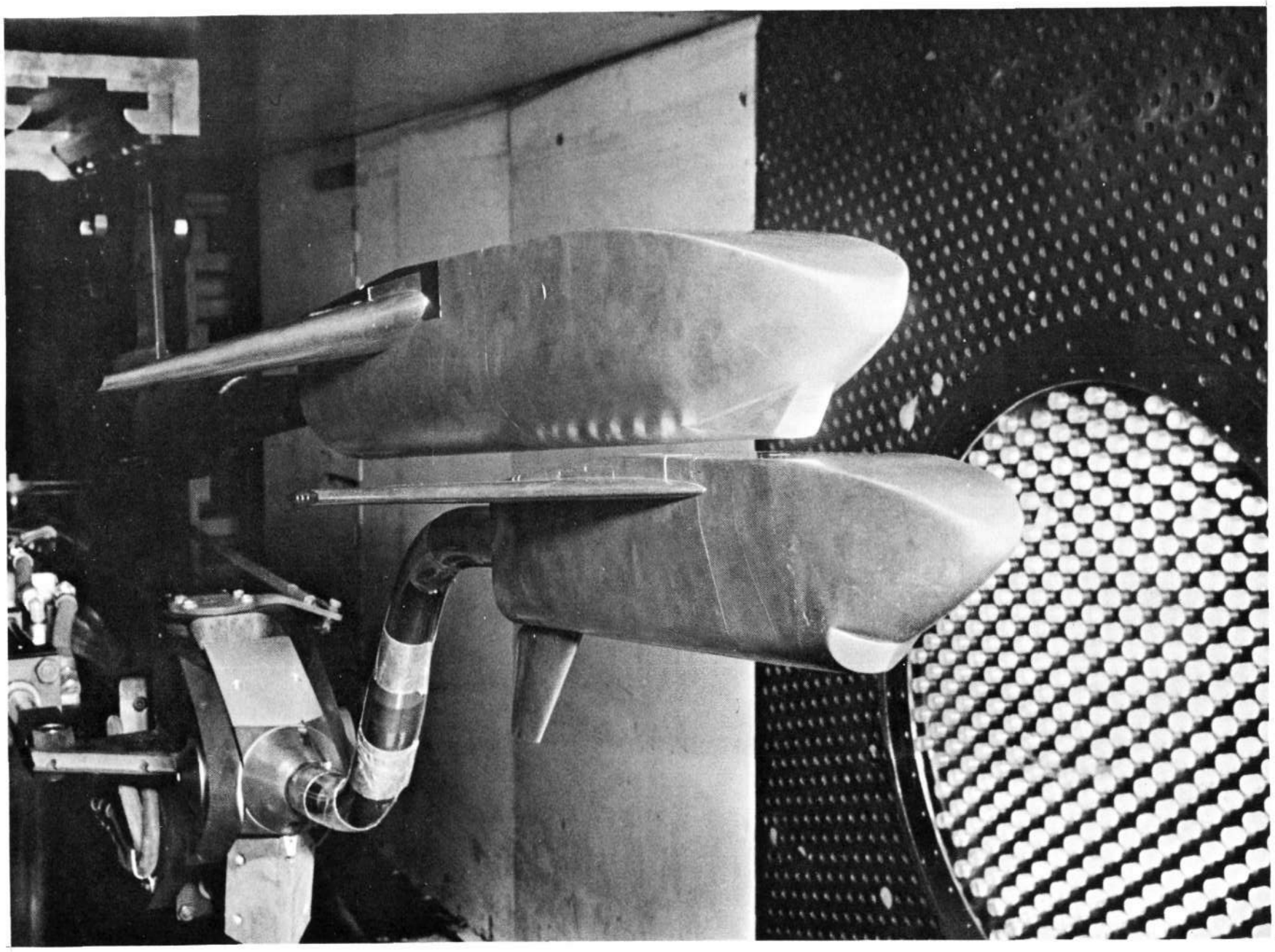
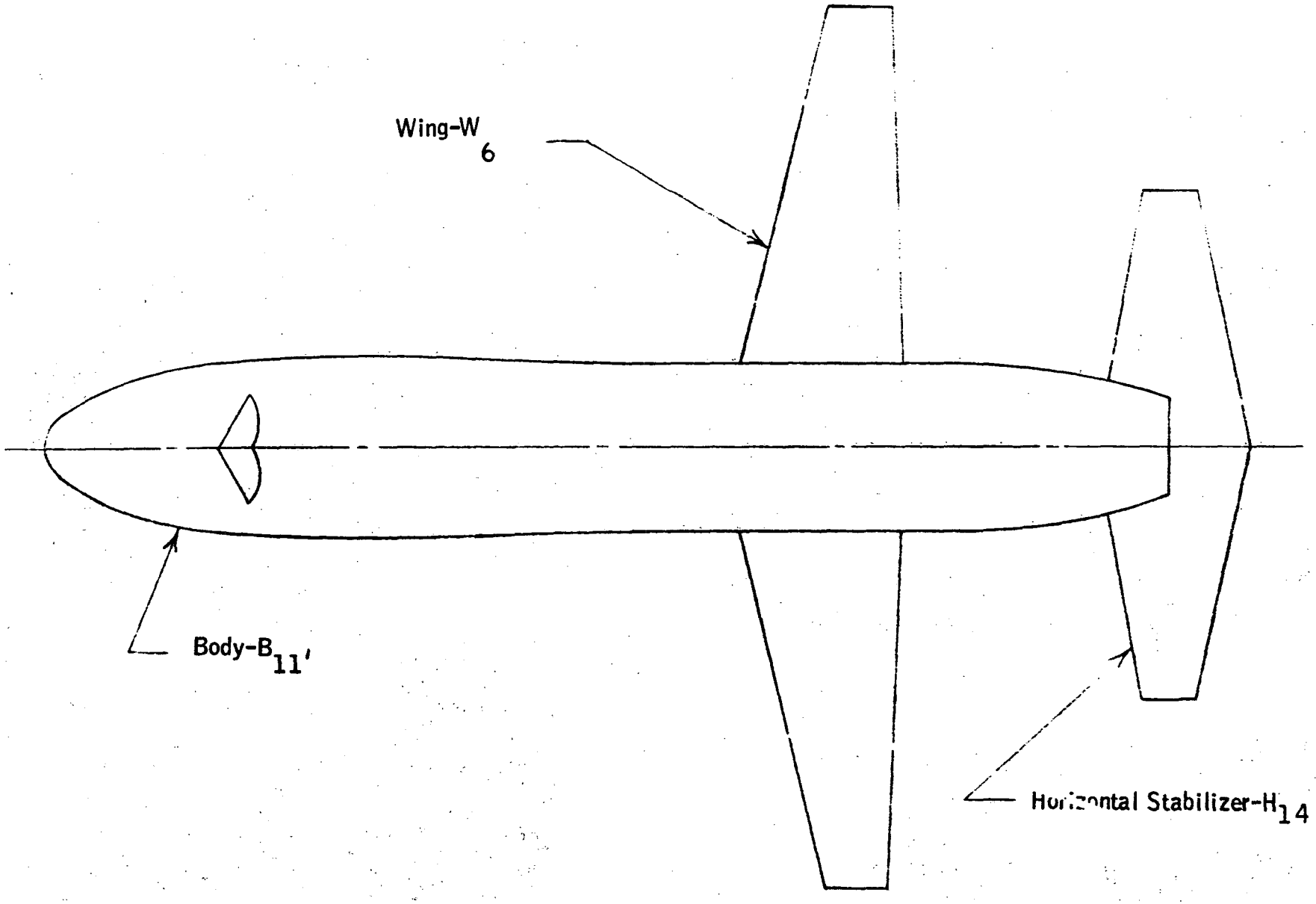
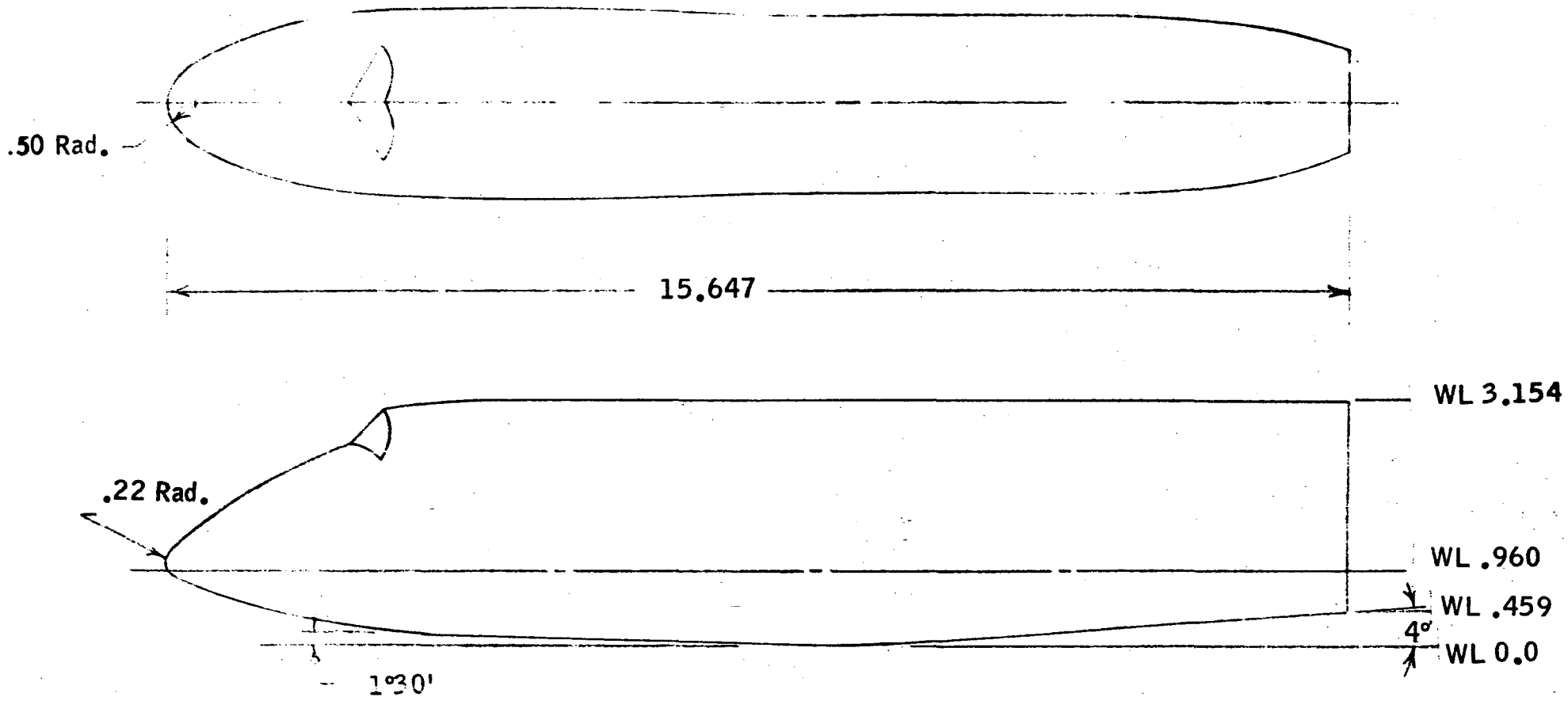


Figure 4. - $B_{11}W_{11}V_5$ and $B_{B3}W_{B6}$ installed in wind tunnel at separation position 15.



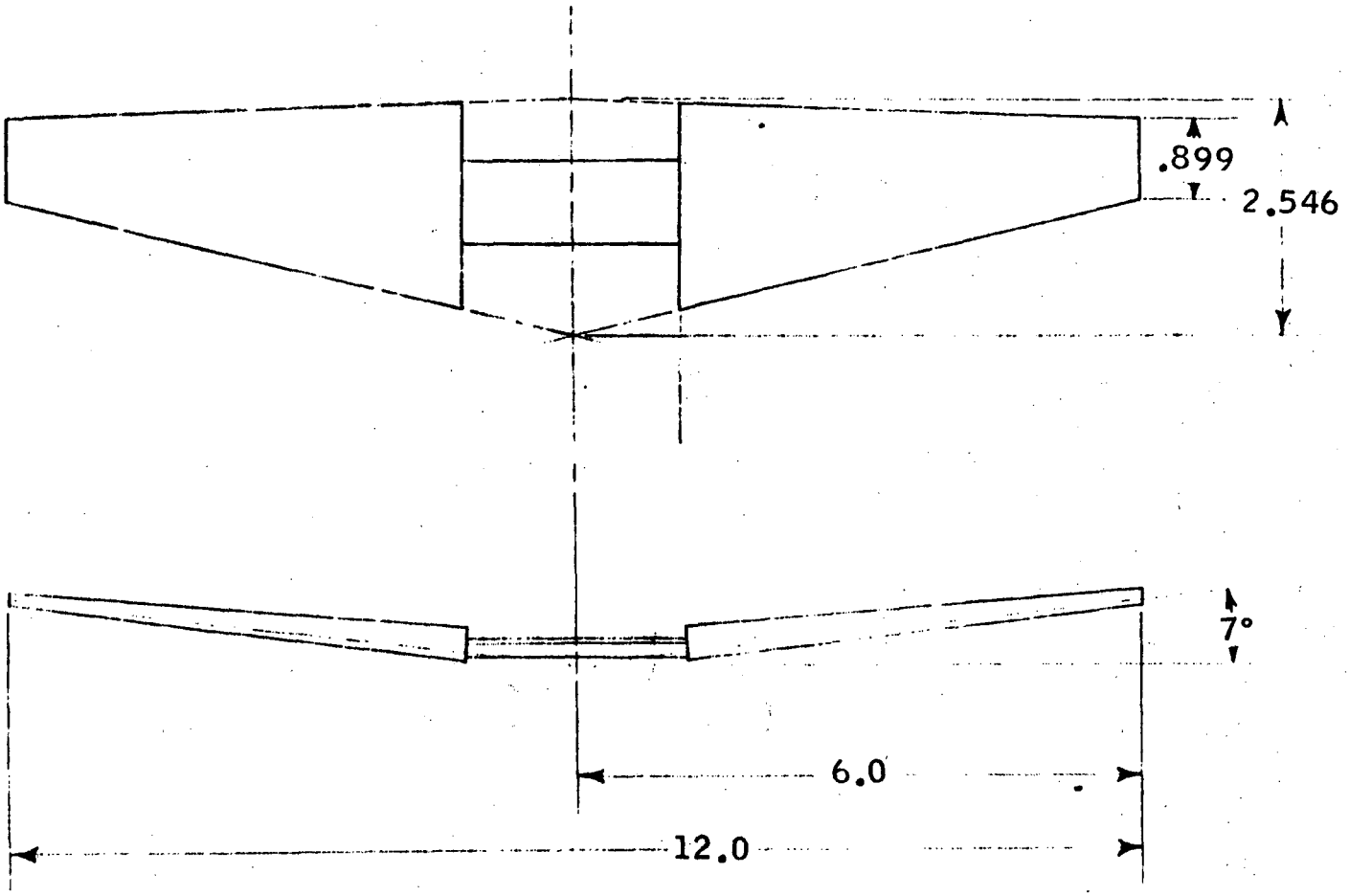
(a) Model Assembly

Figure 5 - 245 Orbiter Configuration. Model S-13A.
All Dimensions are in Inches.



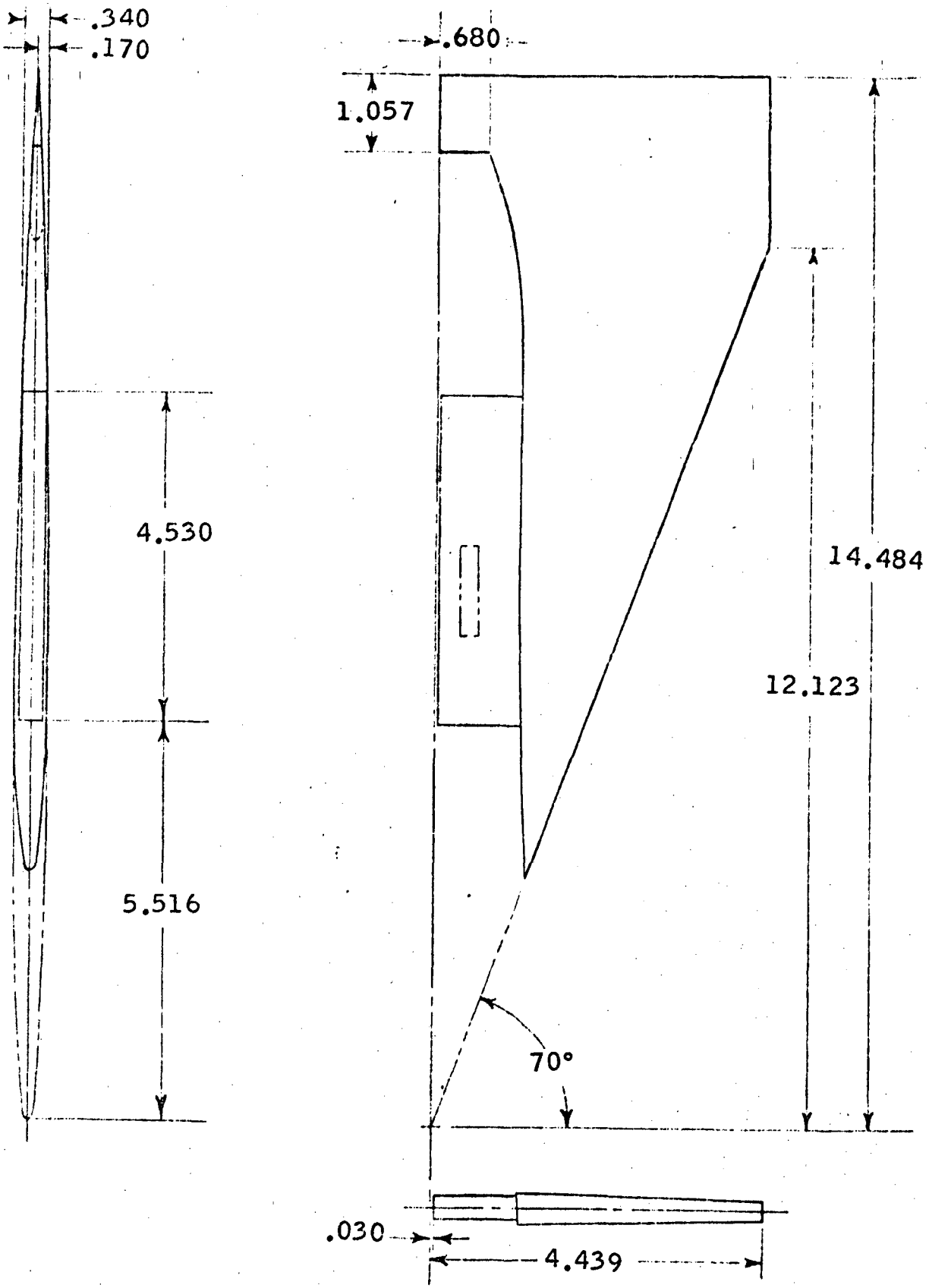
(b) Body - B_{11}

Figure 5. - Continued.



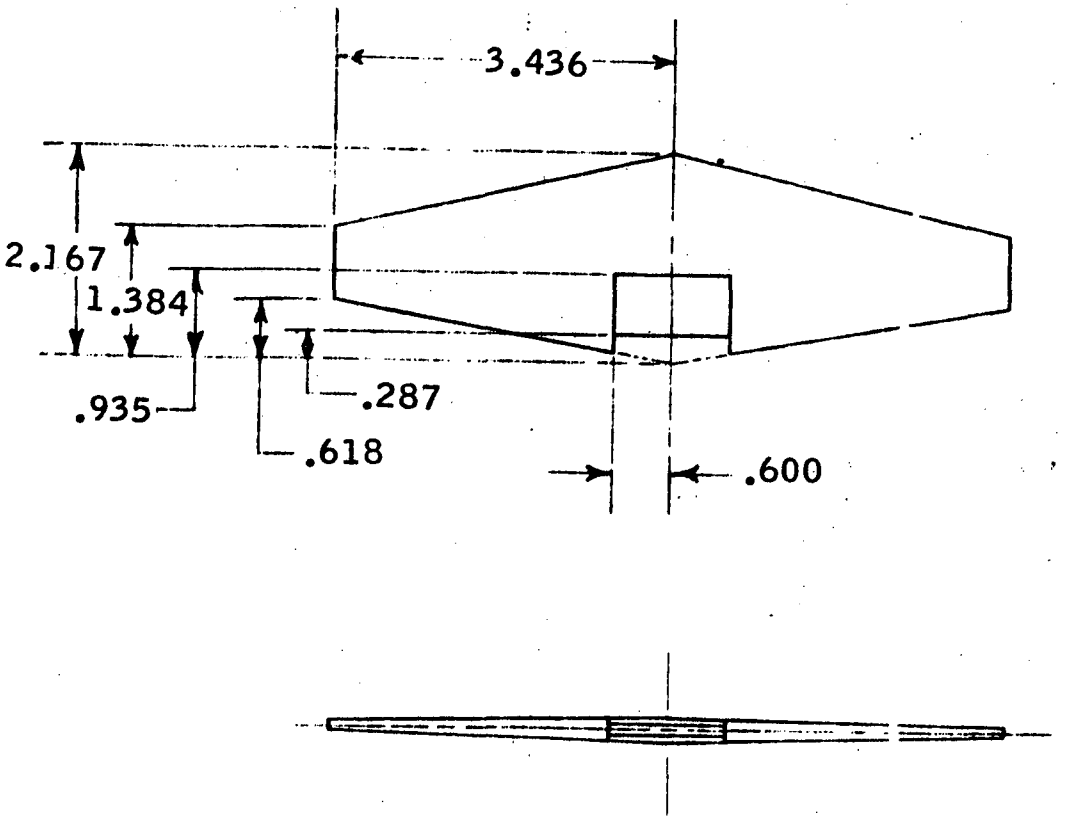
(c) Wing - W_6

Figure 5 - Continued.



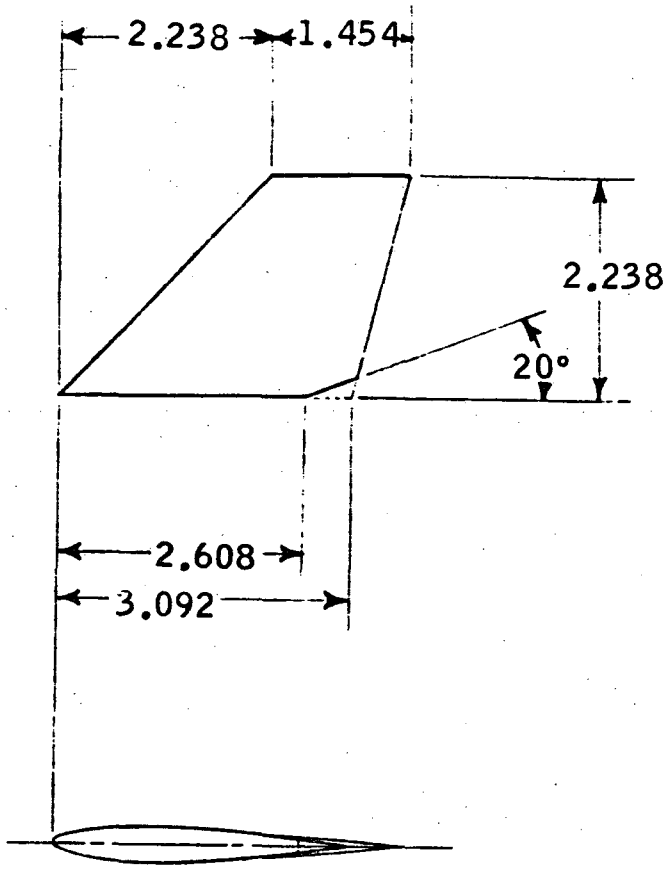
(d) Wing - W_{11}

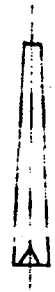
Figure 5 - Continued.



(e) Horizontal stabilizer - H_{14}

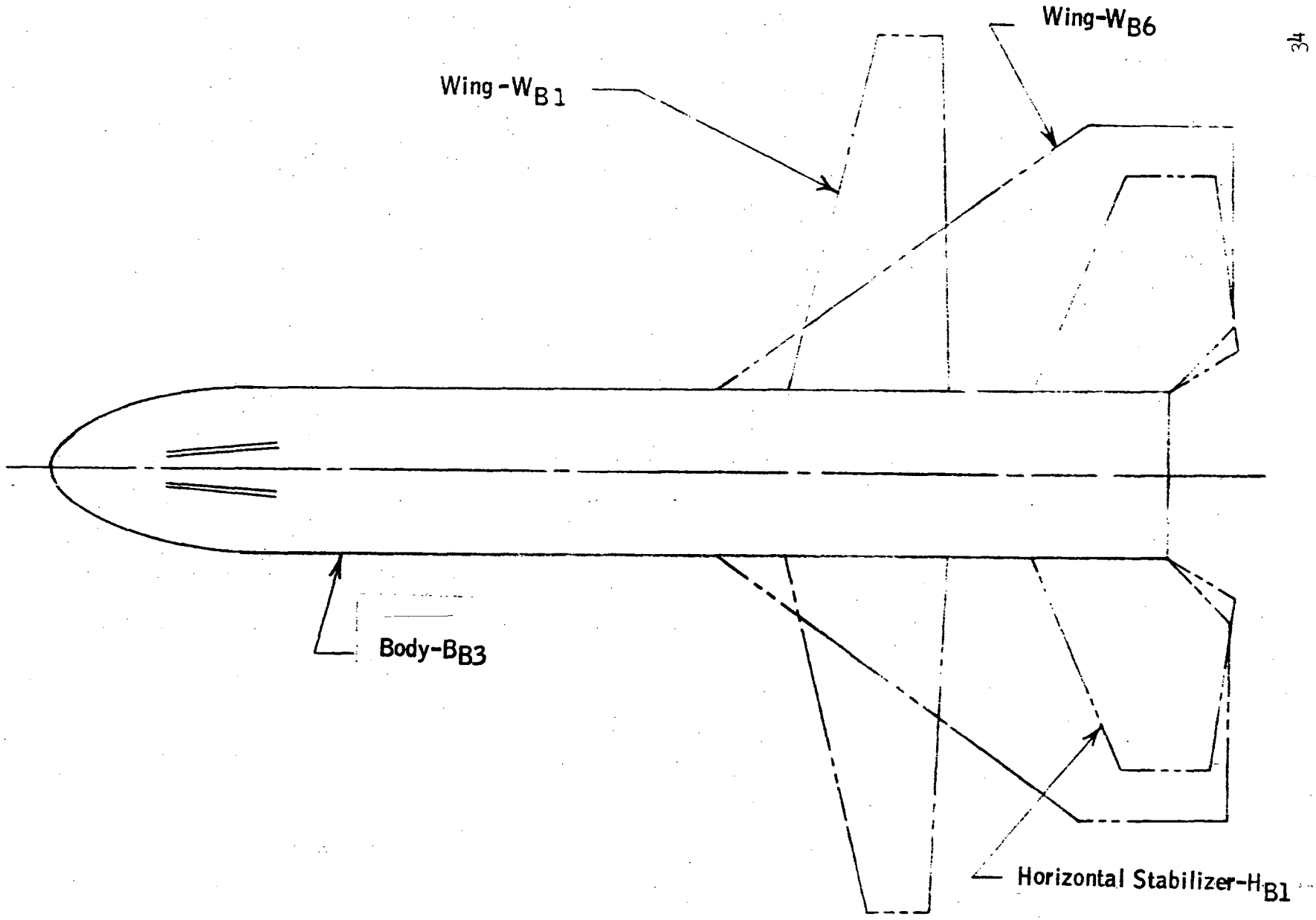
Figure 5 - Continued.





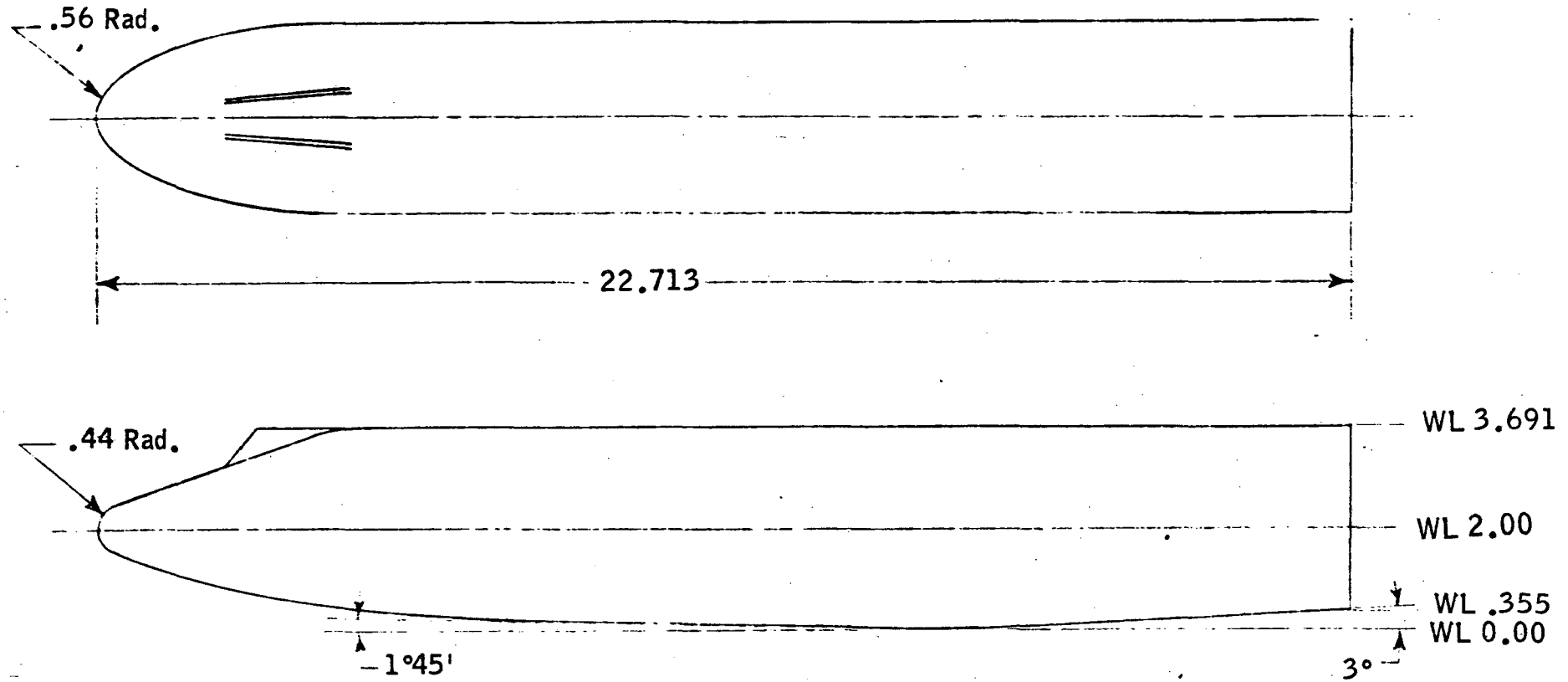
(f) Vertical tail - V_5

Figure 5 - Concluded.



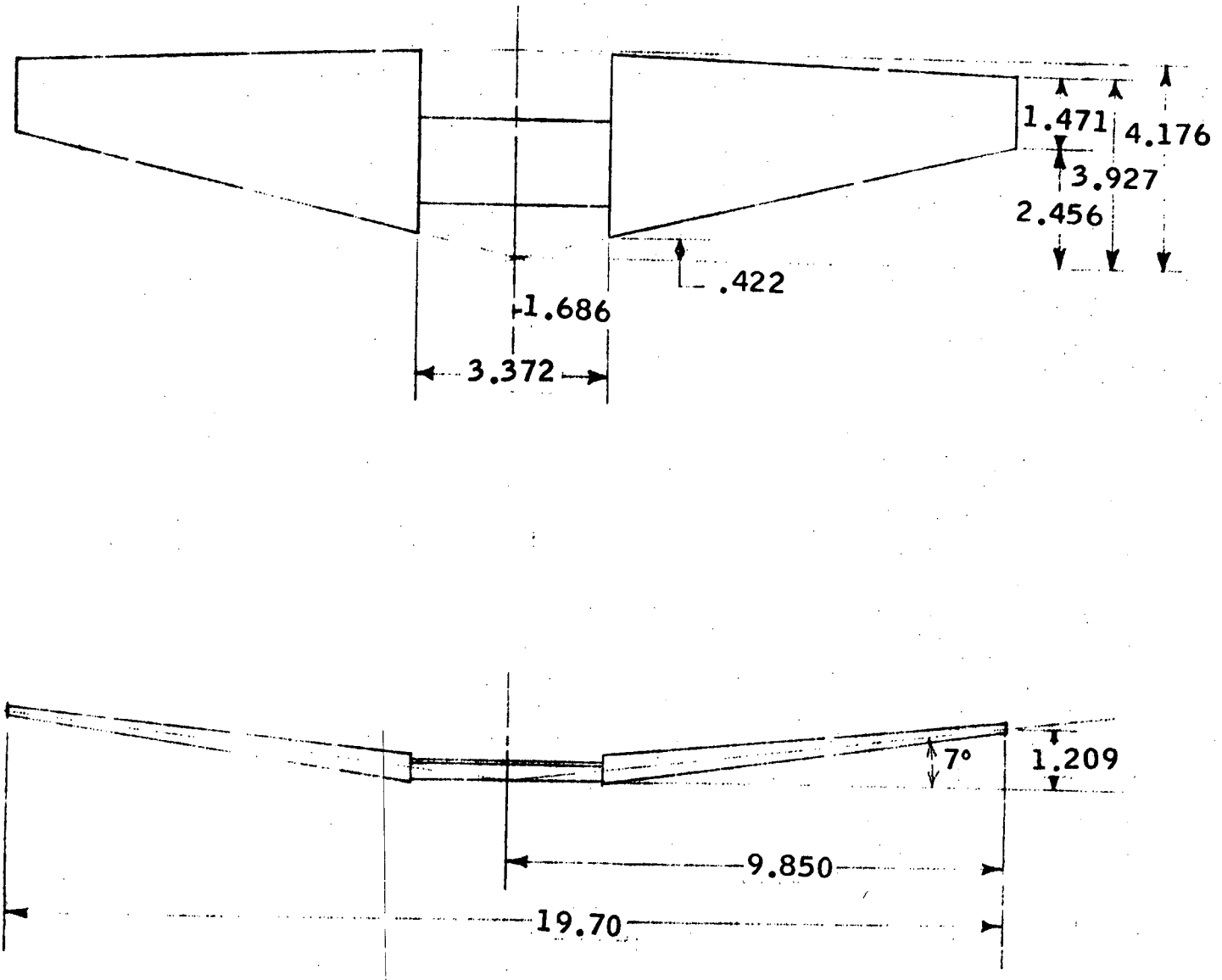
(a) Model Assembly

Figure 6 - 251 Booster Configuration. Model SB-13A. All Dimensions are in Inches.



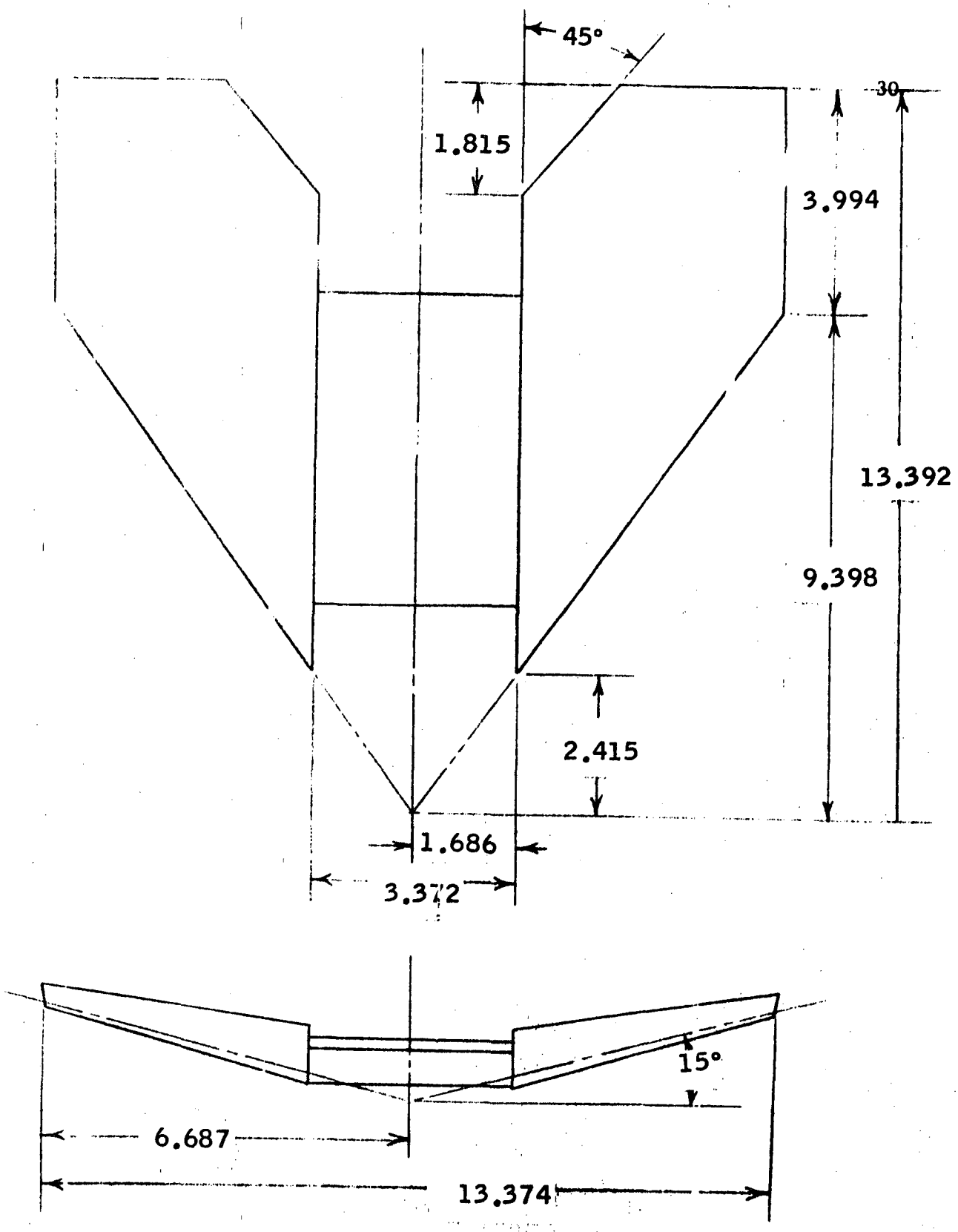
(b) Body - B_{B3}

Figure 6. - Continued.



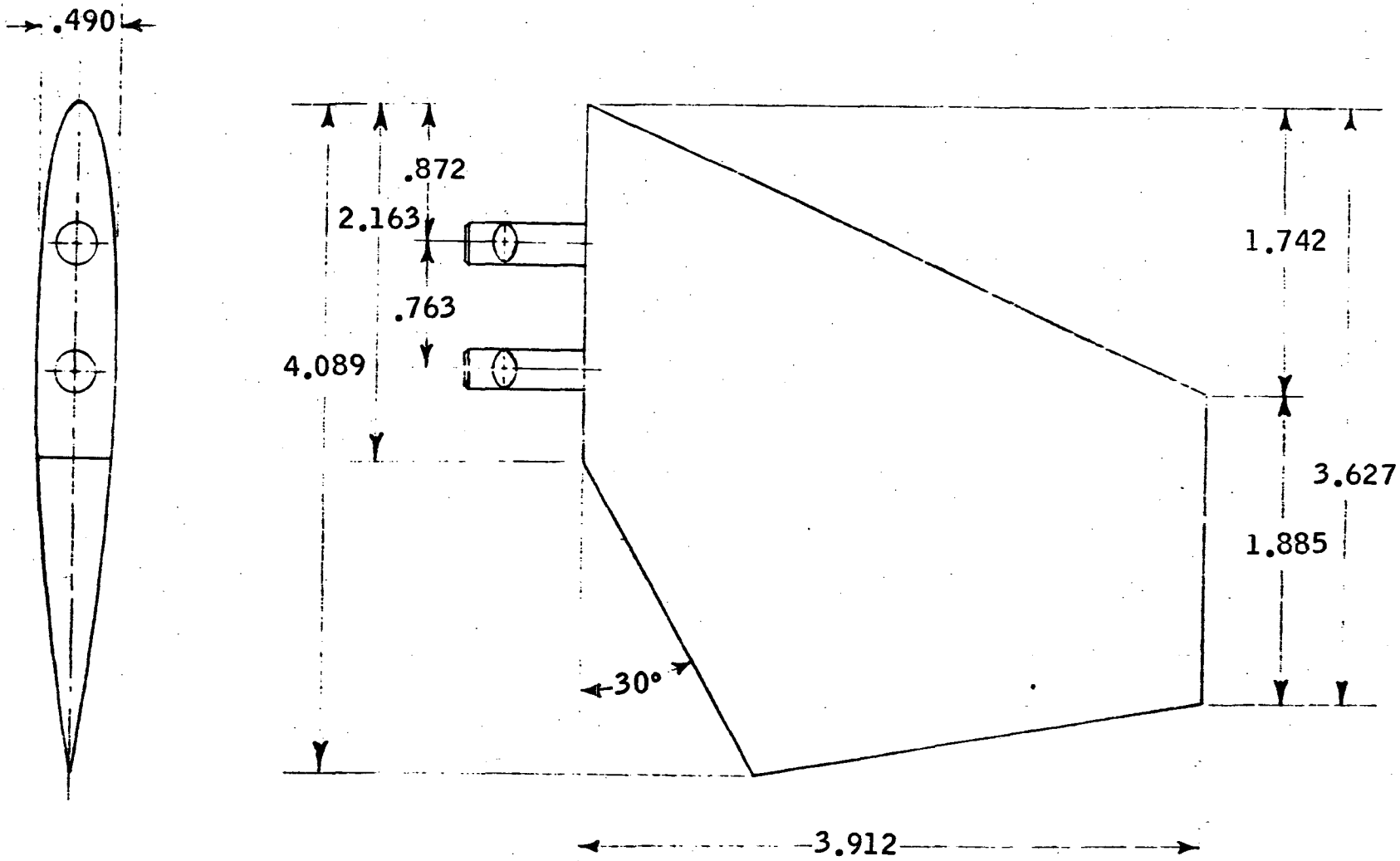
(c) Wing - W_{B1}

Figure 6 - Continued.



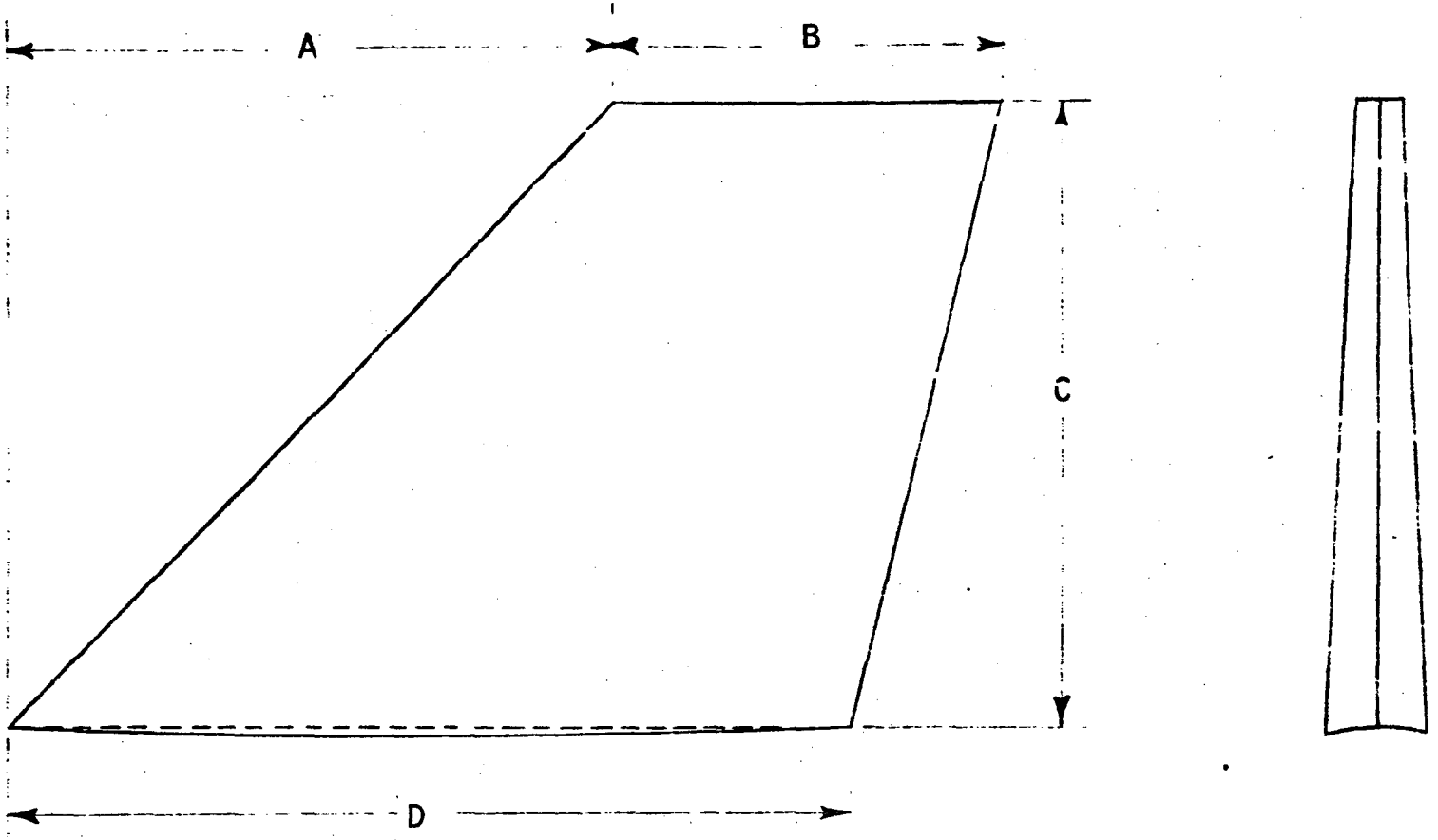
(d) Wing-W_{B6}

Figure 6 - Continued.



(e) Horizontal stabilizer - H
B1

Figure 6. - Continued.



Tail	A	B	C	D
V_{B1}	3.3310	2.1150	3.3310	4.6340
V_{B5}*	6.9070	2.7490	6.9070	6.6520

- * NOT APPLICABLE TO THIS TEST

(f) Vertical tail - V_{B1}, V_{B5}

Figure 6. - Continued. -

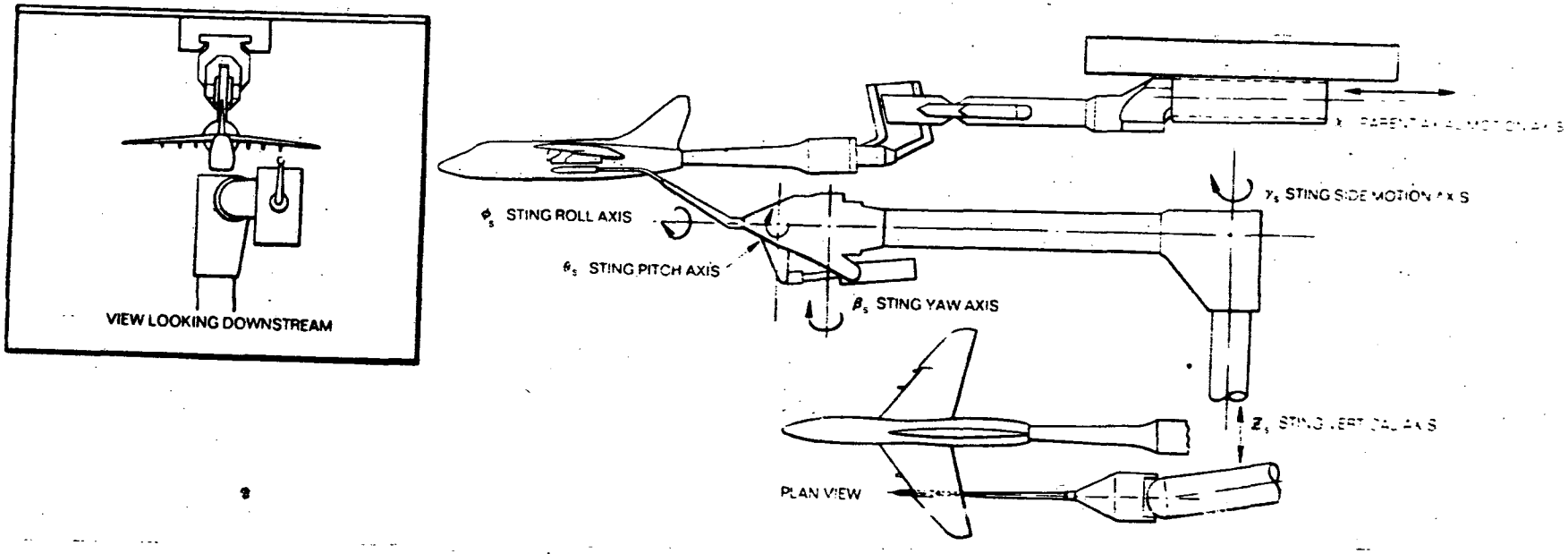


Figure 7 LTV 4-foot high speed wind tunnel dual support system.

TABLE IV

MODEL COMPONENT: BODY - B_{11}

GENERAL DESCRIPTION: ORBITER BODY (S-13A) 0.0088105 SCALE

DRAWING NUMBER: SOY 37100281

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	1776 IN.	15.647 IN.
Max. Width	260 IN.	2.291 IN.
Max. Depth	358 IN.	3.154 IN.
Fineness Ratio	———	———
Area		
Max. Cross-Sectional	———	———
Planform	———	———
Wetted	———	———
Base	313.12 FT^2	3.500 IN^2

TABLE V

MODEL COMPONENT- WING (W6)

GENERAL DESCRIPTION- MSC ORBITER 245 (S-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100384

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	1848.6	20.664
SPAN (EQUIVALENT)	113.50	12.000
ASPECT RATIO	6.969	6.969
TAPER RATIO	0.353	0.353
DIEHEDRAL ANGLE, DEG	7.000	7.000
INCIDENCE ANGLE, DEG	4.000	4.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	14.000	14.000
TRAILING EDGE	1.460	1.460
0.25 ELEMENT LINE	9.271	9.271
CHORDS		
ROOT (WING STA. 0.0)	24.08	2.546
TIP, (EQUIVALENT)	8.49	0.898
MEAN AERODYNAMIC	17.54	1.854
.25 MAC COORDINATES		
X	99.15	10.482
Y	23.85	2.521
Z	2.91	0.307
AIRFOIL SECTION		
ROOT	NACA 0014-64	
TIP	NACA 0010-64	

EXPOSED DATA		
AREA	1386.3	15.496
SPAN (EQUIVALENT)	91.93	9.719
ASPECT RATIO	6.096	6.096
TAPER RATIO	0.392	0.392
CHORDS		
ROOT (WING STA. 0.0)	21.67	2.291
TIP, (EQUIVALENT)	8.49	0.898
MEAN AERODYNAMIC	16.05	1.697
.25 MAC COORDINATES		
X	100.41	10.616
Y	30.42	3.217
Z	2.91	0.307

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE VI

MODEL COMPONENT- WING (W11)

GENERAL DESCRIPTION- MSC ORBITER 245 (S-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100387

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	6687.2	74.750
SPAN (EQUIVALENT)	83.94	8.875
ASPECT RATIO	1.054	1.054
TAPER RATIO	0.163	0.163
DIEHEDRAL ANGLE,DEG	0.000	0.000
INCIDENCE ANGLE,DEG	0.000	0.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	70.000	70.000
TRAILING EDGE	0.000	0.000
0.25 ELEMENT LINE	65.339	65.339
CHORDS		
ROOT (WING STA. 0.0)	137.00	14.484
TIP, (EQUIVALENT)	22.33	2.361
MEAN AERODYNAMIC	93.46	9.882
.25 MAC COORDINATES		
X (FROM BODY NOSE)	88.19	9.324
Y (FROM BODY CL)	15.95	1.686
AIRFOIL SECTION		
ROOT	NACA 0003-64	
TIP	NACA 0012-64	

EXPOSED DATA		
AREA	4037.5	45.131
SPAN (EQUIVALENT)	62.33	6.590
ASPECT RATIO	0.962	0.962
TAPER RATIO	0.208	0.208
CHORDS		
ROOT (WING STA. 0.0)	107.23	11.337
TIP, (EQUIVALENT)	22.33	2.361
MEAN AERODYNAMIC	74.09	7.833
.25 MAC COORDINATES		
X (FROM BODY NOSE)	102.72	10.860
Y (FROM BODY CL)	22.99	2.430

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE VII

MODEL COMPONENT- HORIZONTAL TAIL (H14)

GENERAL DESCRIPTION- MSC ORBITER 245 (S-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100389

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	901.6	10.078
SPAN (EQUIVALENT)	65.00	6.872
ASPECT RATIO	4.686	4.686
TAPER RATIO	0.353	0.353
DIHEDRAL ANGLE,DEG	0.000	0.000
INCIDENCE ANGLE,DEG	0.000	0.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	10.200	10.200
TRAILING EDGE	-12.900	-12.900
0.25 ELEMENT LINE	2.970	2.970
CHORDS		
ROOT (WING STA. 0.0)	20.50	2.167
TIP, (EQUIVALENT)	7.25	0.766
MEAN AERODYNAMIC	14.93	1.579
.25 MAC COORDINATES		
X	145.34	15.367
Y	13.66	1.444
Z	0.00	0.000
AIRFOIL SECTION		
ROOT	NACA 0012-64	
TIP	NACA 0012-64	

EXPOSED DATA		
AREA	588.4	6.577
SPAN (EQUIVALENT)	48.35	5.112
ASPECT RATIO	3.973	3.973
TAPER RATIO	0.424	0.424
CHORDS		
ROOT (WING STA. 0.0)	17.09	1.807
TIP, (EQUIVALENT)	7.25	0.766
MEAN AERODYNAMIC	12.84	1.357
.25 MAC COORDINATES		
X	145.74	15.409
Y	18.78	1.986
Z	0.00	0.000

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE VIII

MODEL COMPONENT- VERTICAL TAIL(V5)

GENERAL DESCRIPTION- MSC ORBITER 245 (S-13A) 0.0088105 SCALE

DRAWING NUMBER- SEY 37100388

DIMENSIONS

EXPOSED DATA	FULL SCALE (FT)	MODEL (IN)
AREA	455.1	5.087
SPAN (EQUIVALENT)	21.17	2.238
ASPECT RATIO	0.985	0.985
TAPER RATIO	0.470	0.470
DIEHEDRAL ANGLE,DEG	0.000	0.000
INCIDENCE ANGLE,DEG	0.000	0.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	45.000	45.000
TRAILING EDGE	15.008	15.008
0.25 ELEMENT LINE	34.811	34.811
CHORDS		
ROOT (WING STA. 0.0)	29.25	3.092
TIP, (EQUIVALENT)	13.75	1.454
MEAN AERODYNAMIC	22.44	2.373
.25 MAC COORDINATES		
X	138.25	14.617
Y	0.00	0.000
Z	39.14	4.139
AIRFOIL SECTION		
ROOT	NACA 0012-64	
TIP	NACA 0012-64	

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE IX

MODEL COMPONENT: BODY - B_{83}

GENERAL DESCRIPTION: BOOSTER 251 REVISION B (SB-13A) 0.0088103 SCALE.

DRAWING NUMBER: SDY 37100282

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	2578 IN.	22.713 IN.
Max. Width	384 IN.	3.383 IN.
Max. Depth	419 IN.	3.691 IN.
Fineness Ratio		
Area		
Max. Cross-Sectional	1006.9 FT^2	11.255 IN^2
Planform		
Wetted		
Base	899.5 FT^2	10.054 IN^2

TABLE X

MODEL COMPONENT- WING (WB1)

GENERAL DESCRIPTION- MSC BOOSTER 251 (SB-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100370

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	4889.8	54.658
SPAN (EQUIVALENT)	186.33	19.700
ASPECT RATIO	7.100	7.100
TAPER RATIO	0.347	0.347
DIEHEDRAL ANGLE, DEG	7.000	7.000
INCIDENCE ANGLE, DEG	4.000	4.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	14.000	14.000
TRAILING EDGE	1.460	1.460
0.25 ELEMENT LINE	9.360	9.360
CHORDS		
ROOT (WING STA. 0.0)	38.98	4.121
TIP, (EQUIVALENT)	13.51	1.428
MEAN AERODYNAMIC	28.32	2.994
.25 MAC COORDINATES		
X	150.07	15.867
Y	39.05	4.128
Z	4.76	0.503
AIRFOIL SECTION		
ROOT	NACA 0014-64	
TIP	NACA 0010-64	

EXPOSED DATA		
AREA	3777.2	42.221
SPAN (EQUIVALENT)	154.44	16.328
ASPECT RATIO	6.314	6.314
TAPER RATIO	0.381	0.381
CHORDS		
ROOT (WING STA. 0.0)	35.41	3.744
TIP, (EQUIVALENT)	13.51	1.428
MEAN AERODYNAMIC	26.11	2.760
.25 MAC COORDINATES		
X	151.95	16.065
Y	48.79	5.159
Z	4.76	0.503

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE XI

MODEL COMPONENT- WING (WB6)

GENERAL DESCRIPTION- MSC BOOSTER 251 (S8-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100430

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	10400.8	106.846
SPAN (EQUIVALENT)	126.50	13.374
ASPECT RATIO	1.538	1.538
TAPER RATIO	0.298	0.298
DIEHEDRAL ANGLE, DEG	15.000	15.000
INCIDENCE ANGLE, DEG	2.283	2.283
SWEEP BACK ANGLE, DEG		
LEADING EDGE	55.000	55.000
TRAILING EDGE	-0.000	-0.000
0.25 ELEMENT LINE	46.072	46.072
CHORDS		
ROOT (WING STA. 0.0)	126.67	13.392
TIP, (EQUIVALENT)	37.78	3.994
MEAN AERODYNAMIC	90.28	9.544
.25 MAC COORDINATES		
X	164.92	17.437
Y	25.93	2.741
Z	6.71	0.709
AIRFOIL SECTION		
ROOT	NACA 4410	
TIP	NACA 4410	

EXPOSED DATA		
AREA	6701.2	74.906
SPAN (EQUIVALENT)	94.60	10.002
ASPECT RATIO	1.336	1.336
TAPER RATIO	0.364	0.364
CHORDS		
ROOT (WING STA. 0.0)	103.89	10.984
TIP, (EQUIVALENT)	37.78	3.994
MEAN AERODYNAMIC	76.02	8.037
.25 MAC COORDINATES		
X	175.63	18.569
Y	35.92	3.798
Z	6.71	0.709

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE XII

MODEL COMPONENT- HORIZONTAL TAIL (HB1)

GENERAL DESCRIPTION- MSC BOOSTER 251 (SB-13A) 0.0088105 SCALE

DRAWING NUMBER- SEY 37100369

DIMENSIONS

TOTAL DATA	FULL SCALE (FT)	MODEL (IN)
AREA	3540.2	39.572
SPAN (EQUIVALENT)	105.90	11.196
ASPECT RATIO	3.168	3.168
TAPER RATIO	0.364	0.364
DIEHEDRAL ANGLE, DEG	0.000	0.000
INCIDENCE ANGLE, DEG	0.000	0.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	24.000	24.000
TRAILING EDGE	-7.000	-7.000
0.25 ELEMENT LINE	14.349	14.349
CHORDS		
ROOT (WING STA. 0.0)	49.03	5.184
TIP, (EQUIVALENT)	17.83	1.885
MEAN AERODYNAMIC	35.88	3.793
.25 MAC COORDINATES		
X	206.19	21.800
Y	22.36	2.364
Z	0.00	0.000
AIRFOIL SECTION		
ROOT	NACA 0012-64	
TIP	NACA 0012-64	

EXPOSED DATA		
AREA	2138.8	23.908
SPAN (EQUIVALENT)	74.00	7.824
ASPECT RATIO	2.560	2.560
TAPER RATIO	0.446	0.446
CHORDS		
ROOT (WING STA. 0.0)	39.97	4.226
TIP, (EQUIVALENT)	17.83	1.885
MEAN AERODYNAMIC	30.33	3.207
.25 MAC COORDINATES		
X	209.13	22.111
Y	32.08	3.392
Z	0.00	0.000

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

TABLE XIII

MODEL COMPONENT- VERTICAL TAIL(VB1)

GENERAL DESCRIPTION- MSC BOOSTER 251 (SB-13A) 0.0088105 SCALE

DRAWING NUMBER- SDY 37100362

DIMENSIONS

EXPOSED DATA	FULL SCALE (FT)	MODEL (IN)
AREA	1005.6	11.240
SPAN (EQUIVALENT)	31.51	3.331
ASPECT RATIO	0.987	0.987
TAPER RATIO	0.456	0.456
DIEHEDRAL ANGLE,DEG	0.000	0.000
INCIDENCE ANGLE,DEG	0.000	0.000
SWEEP BACK ANGLE, DEG		
LEADING EDGE	45.000	45.000
TRAILING EDGE	13.700	13.700
0.25 ELEMENT LINE	34.841	34.841
CHORDS		
ROOT (WING STA. 0.0)	43.83	4.634
TIP, (EQUIVALENT)	20.00	2.115
MEAN AERODYNAMIC	33.42	3.533
.25 MAC COORDINATES		
X	199.49	21.092
Y	0.00	0.000
Z	48.70	5.149
AIRFOIL SECTION		
ROOT	NACA 0012-64	
TIP	NACA 0012-64	

DIMENSIONS OBTAINED FROM MODEL DRAWINGS

NOMENCLATURE

(General)

SYMBOL	SADSAC SYMBOL	DEFINITION
α	ALPHA	angle of attack, angle between the projection of the wind X_w-axis on the body X, Z-plane and the body X-axis; degrees
β	BETA	sideslip angle, angle between the wind X_w-axis and the projection of this axis on the body X-Z-plane; degrees
ψ	PSI	yaw angle, angle of rotation about the body Z-axis, positive when the positive X-axis is rotated toward the positive Y-axis; degrees
ϕ	PHI	roll angle, angle of rotation about the body X-axis, positive when the positive Y-axis is rotated toward the positive Z-axis; degrees
ρ		air density; K_g/m^3, slugs/ft^3
a		speed of sound; m/sec, ft/sec
V		speed of vehicle relative to surrounding atmosphere; m/sec, ft/sec
q	Q(PSI) Q(PSF)	dynamic pressure; $1/2\rho V^2$, psi, psf
M	MACH	Mach number; V/a
RN/L	RN/L	Reynolds number per unit length; million/ft
p		static pressure; psi
P		total pressure; psi
C_p	CP	pressure coefficient; $(p-p_\infty)/q$

NOMENCLATURE (Continued)

Reference & C. G. Definitions

SYMBOL	SADSAC SYMBOL	DEFINITION
S		wing area; m^2, ft^2
S_{ref}	SREF	reference area; m^2, ft^2
$\bar{c}$		wing mean aerodynamic chord or reference chord; m, ft, in (see ℓ_{ref} or LREF)
ℓ_{ref}	LREF	reference length; m, ft, in.; (see $\bar{c}$)
b_{ref}	BREF	wing span or reference span; m, ft, in
A_b		base area; m^2, ft^2, in^2
c. g.		center of gravity
MRP	MRP	abbreviation for moment reference point
	XMRP	abbreviation for moment reference point on X-axis
	YMRP	abbreviation for moment reference point on Y-axis
	ZMRP	abbreviation for moment reference point on Z-axis

NOMENCLATURE (Continued)

Axis System General

SYMBOL	DEFINITION
F	force; F, lbs
M	moment; M, in-lb

Subscript	Definition
N	normal force
A	axial force
L	lift force
D	drag force
Y	force or moment about the Y axis
Z	moment about the Z axis
X	moment about the X axis
s	stability axis system
w	wind axis system
ref	reference conditions
∞	free stream conditions
t	total conditions
b	base

NOMENCLATURE (Continued)

Body Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal force coefficient; F_N/qS
C_A	CA	axial force coefficient; F_A/qS
C_{A_b}	CAB	base axial force coefficient; $\left[-1\right] \left[(p_b - p_\infty)/q\right] (A_b/S)$
C_{A_f}	CAF	forebody axial force coefficient; $C_A - C_{A_b}$
C_m	CIM	pitching moment coefficient; $M_Y/qS\, \ell_{ref}$
C_y	CY	side force coefficient; F_Y/qS
C_n	CYN	yawing moment coefficient; $M_Z/qS\, b_{ref}$
C_ℓ	CBL	rolling moment coefficient, $M_X/qS\, b_{ref}$

NOMENCLATURE (Continued)

Stability Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_L	CL	lift force coefficient; F_L/qS
C_D	CD	drag force coefficient; F_D/qS
C_{D_b}	CDB	base drag coefficient
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_m	CLM	pitching moment coefficient; $M_{Y,s}/qS\ \ell_{ref}$
C_y	CY	side force coefficient; F_Y/qS
C_n	CLN	yawing moment coefficient; $M_{Z,s}/qS\ b_{ref}$
C_ℓ	CSL	rolling moment coefficient; $M_{X,s}/qS\ b_{ref}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

Wind Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_L	CL	lift force coefficient; F_L/qS
C_D	CDTOTL	drag force coefficient; F_D/qS
C_{D_b}	CDBW	base drag coefficient
C_{D_f}	CDFORE	forebody drag coefficient; $C_D - C_{D_b}$
C_m	CPM	pitching moment coefficient; $M_{Y,w}/qS\,\ell_{ref}$
C_c	CC	chord force coefficient; $F_{Y,w}/qS$
C_n	CLN	yawing moment coefficient; $M_{Z,w}/qS\,b_{ref}$
C_ℓ	CWL	rolling moment coefficient; $M_{X,w}/qS\,b_{ref}$
L/D	CL/CD	lift-to-drag; C_L/C_D
L/D_f	CL/CDF	lift to forebody drag ratio; C_L/C_{D_f}

ADDITIONS TO NOMENCLATURE

SYMBOL	SADSAC SYMBOL	DEFINITION
	SEPPOS	Parameter name for separation position (see Table II)
B	ALPB	Parameter name for booster angle of attack, degrees
B	BETB	Parameter name for booster angle of sideslip
C_{p_b}	CPB	Base pressure coefficient, $(P_b - P_\infty)/q$
C_{p_c}	CPC	Balance cavity pressure coefficient, $(P_b - P_\infty)/q$

TABULATED DATA LISTING

A tabulated data listing, consisting of all aero data sets, both original and those created in arriving at the plotted material to be presented subsequently, is available as an addendum to this report. The tabular listing is made up in two sections:

(a) a brief summary list of all data sets containing the identifier, the descriptor, and the resident dependent variables.

(b) a full list of all data sets containing all resident or selected aerodynamic coefficients of the data sets as well as the above mentioned information.

The listing is currently sent on limited distribution to the following organizations:

NASA AMES	Mr. V. Stevens
NASA MSC	Mr. Ray Nelson

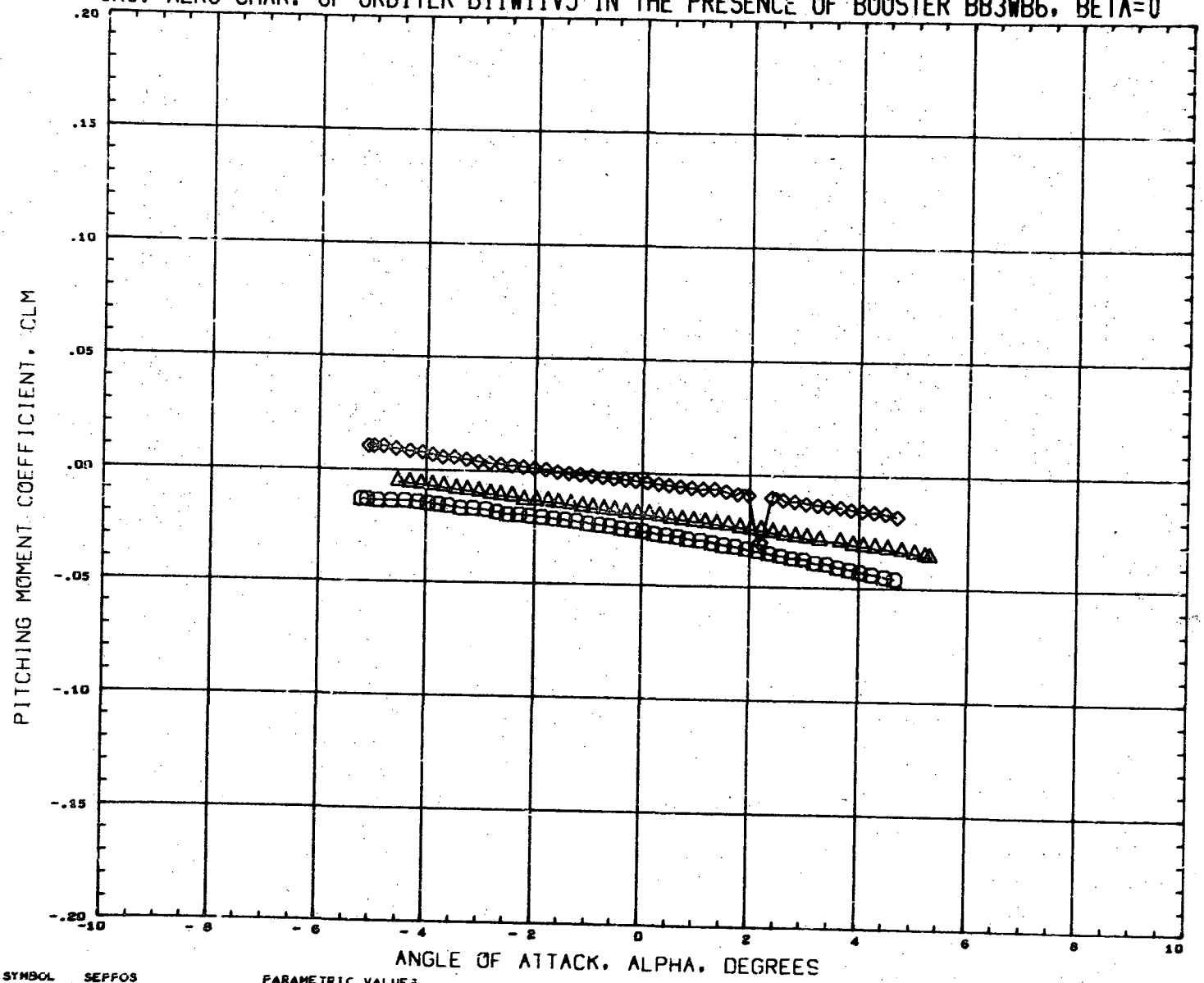
If copies of this listing are desired, please contact the above or the cognizant SADSAC personnel who, for this data, is:

W. R. Morgan
Department 2780
Chrysler Corporation Space Division
New Orleans, La. 70129

(504) 255-2304

PLOTTED DATA

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

BETA	- 0.041	MACH	0.600
ALPB	0.166	BETB	- 0.008

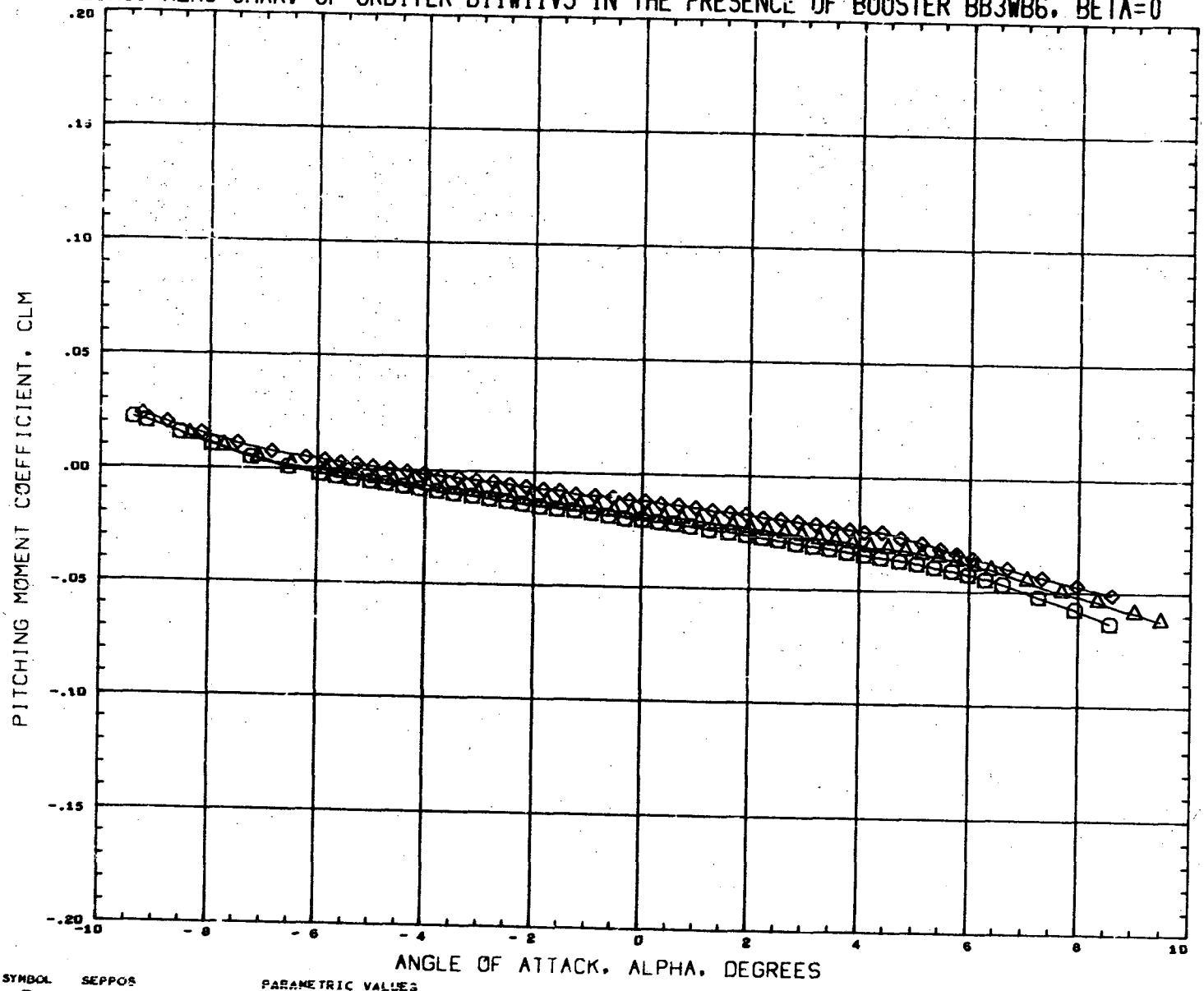
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU039) 21 JUN 71 PAGE 1

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



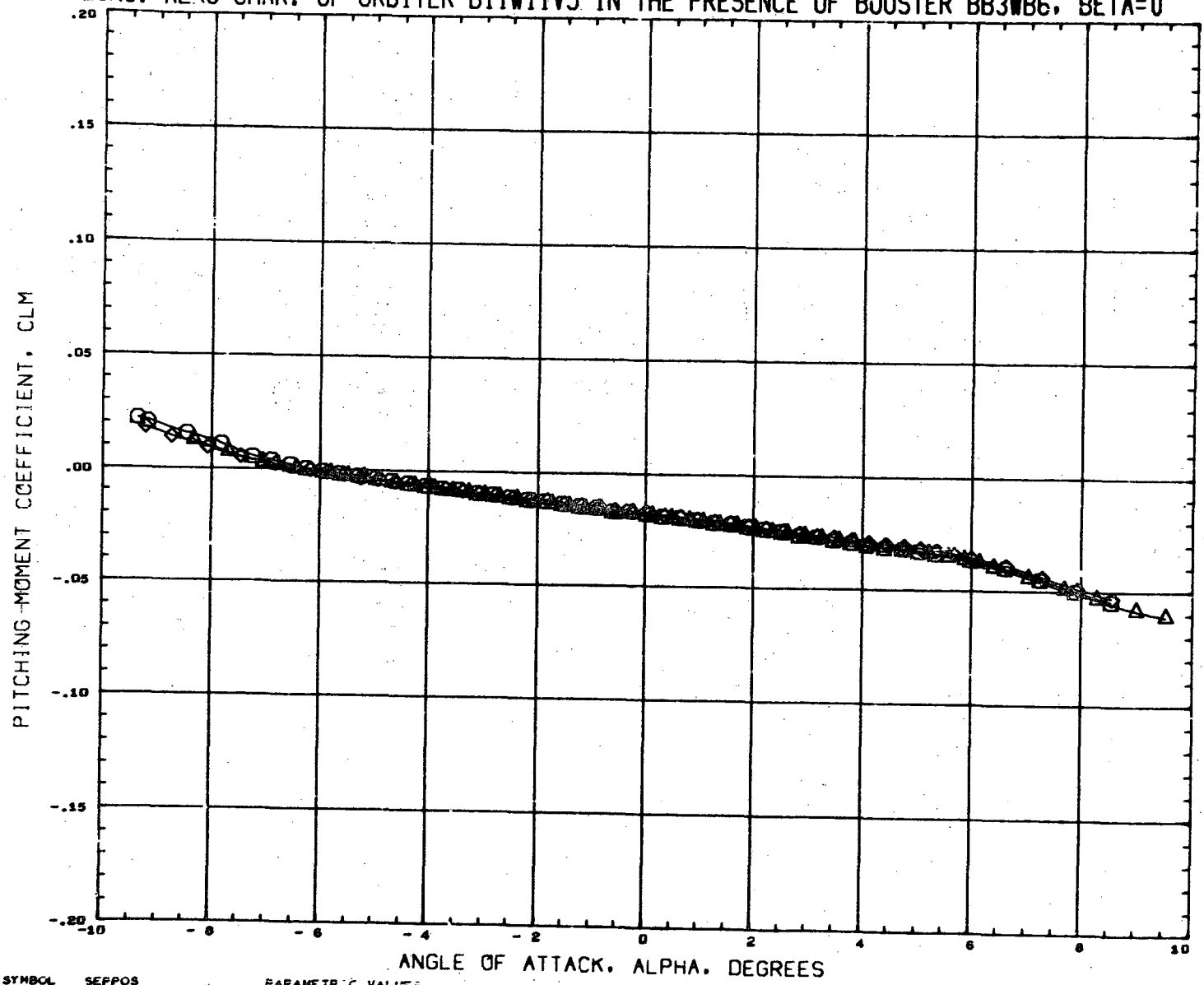
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.041	MACH	0.600
△	0.005	ALPB	0.160	BETB	- 0.008
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



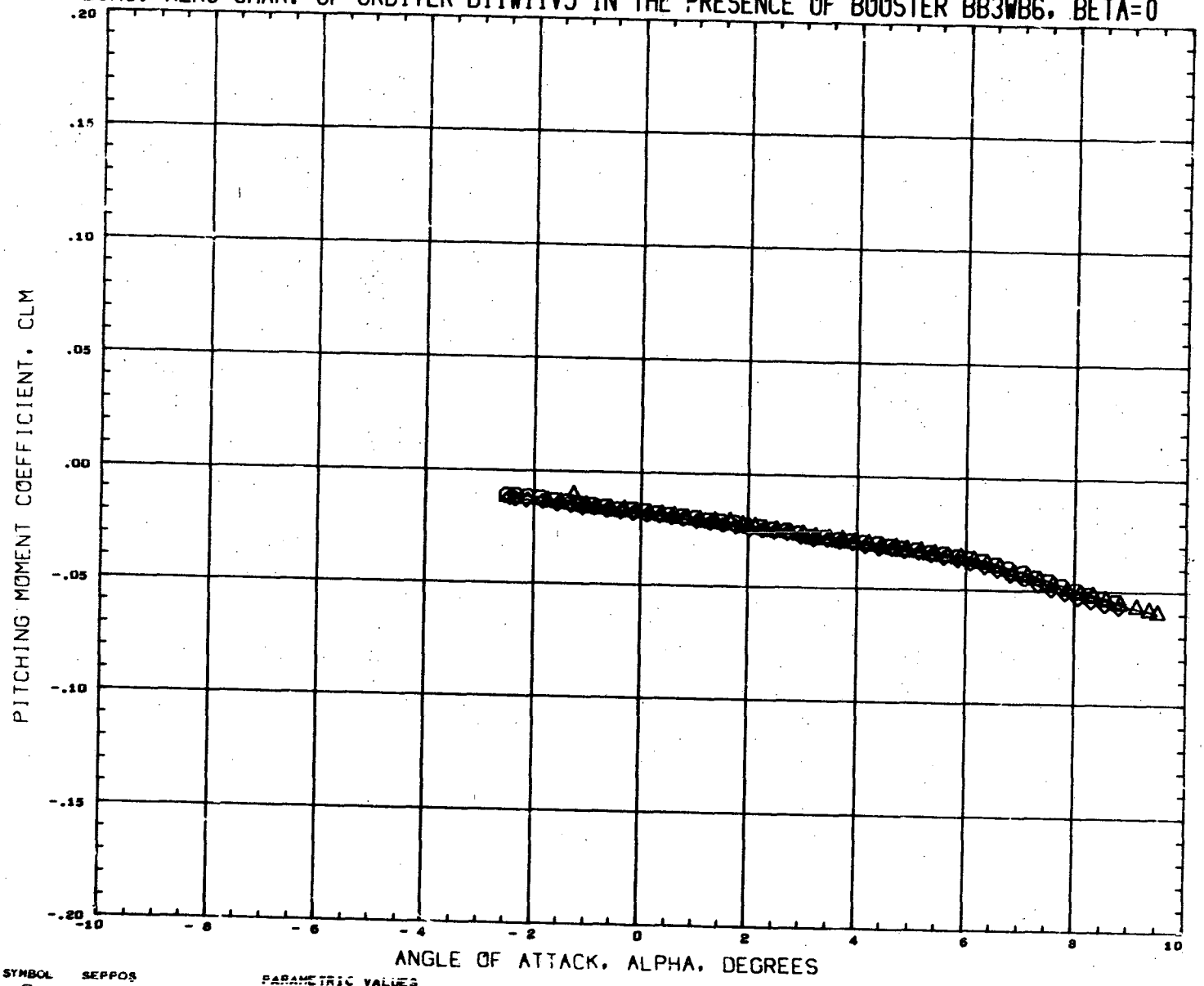
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.007	BETA	- 0.041	MACH	0.600
△	0.008	ALFB	0.166	BETB	- 0.008
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3886	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



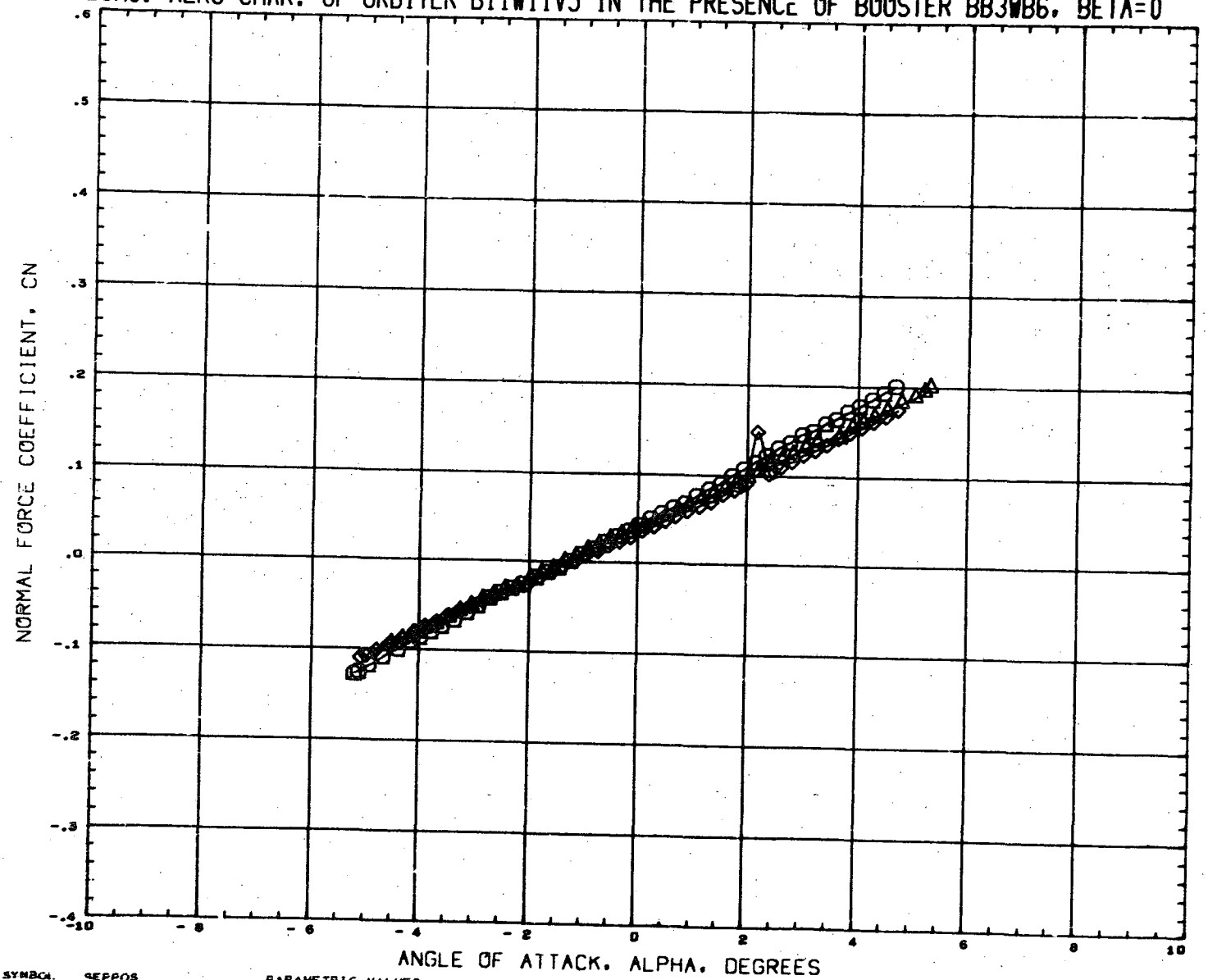
SYMBOL	SEPPOS	PARAMETRIC VALUES			
△	0.010	BETA	- 0.041	MACH	0.600
○	0.011	ALPB	0.166	BETB	- 0.008
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3850	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0086	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

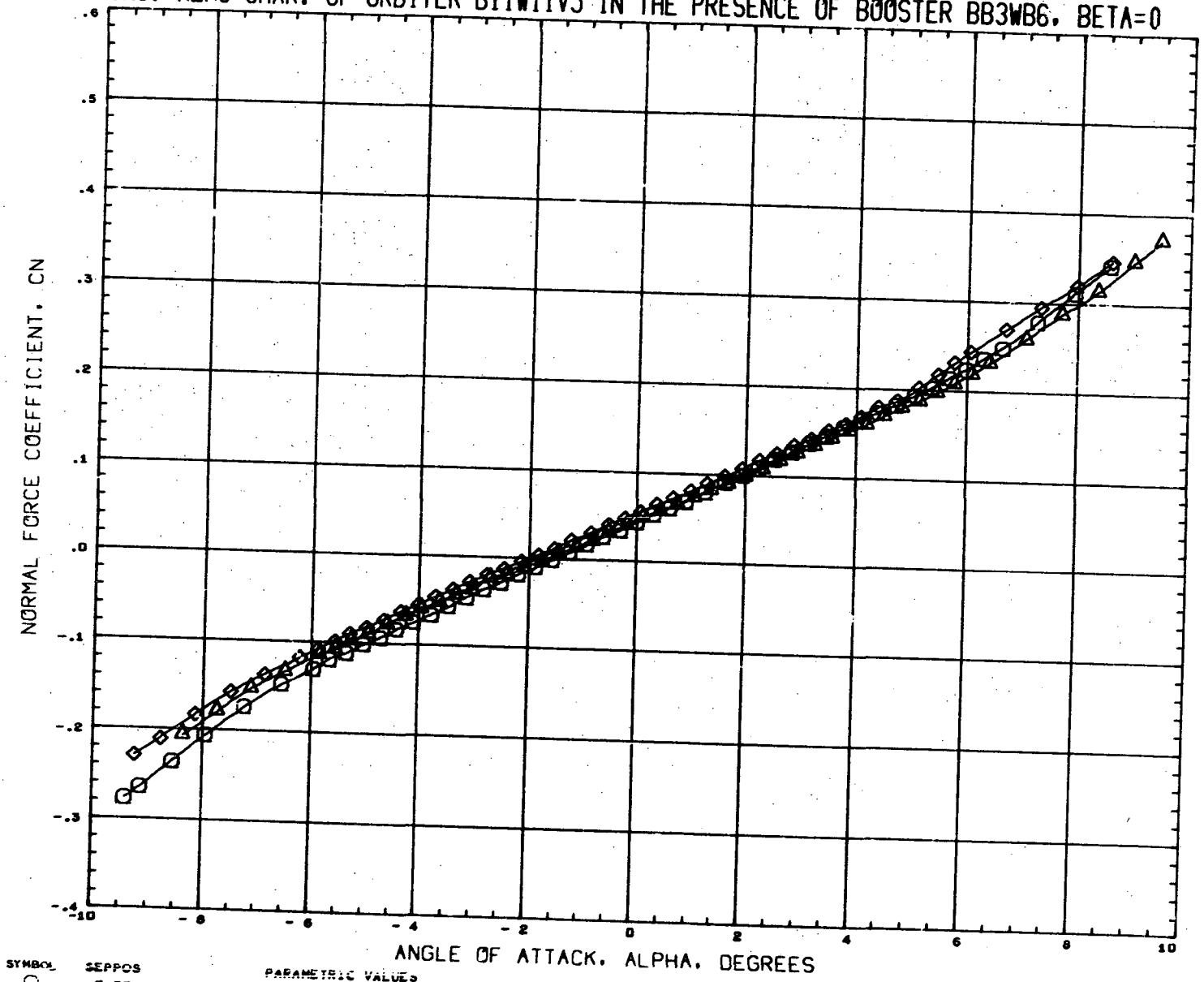
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0086	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

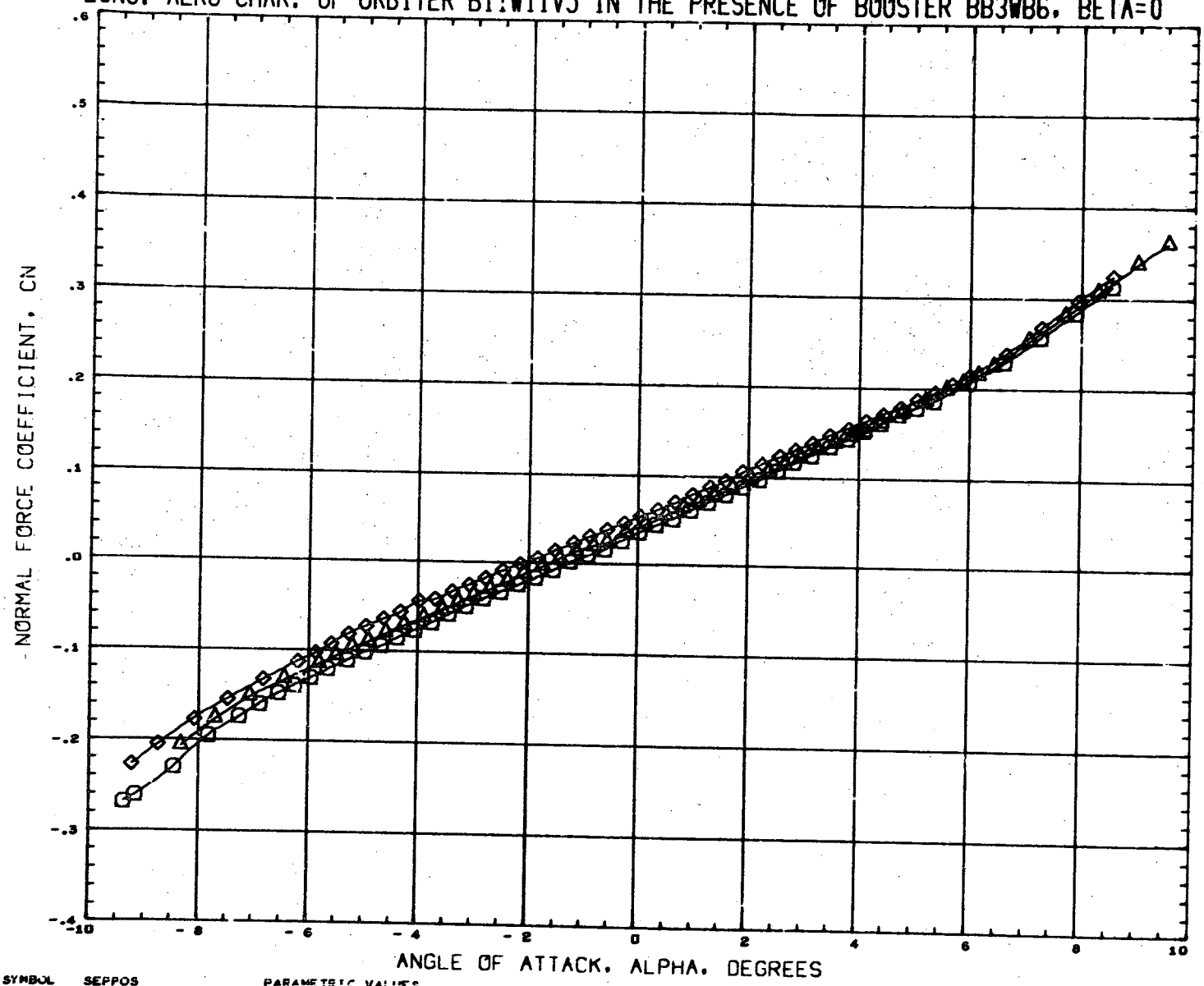
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8620	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



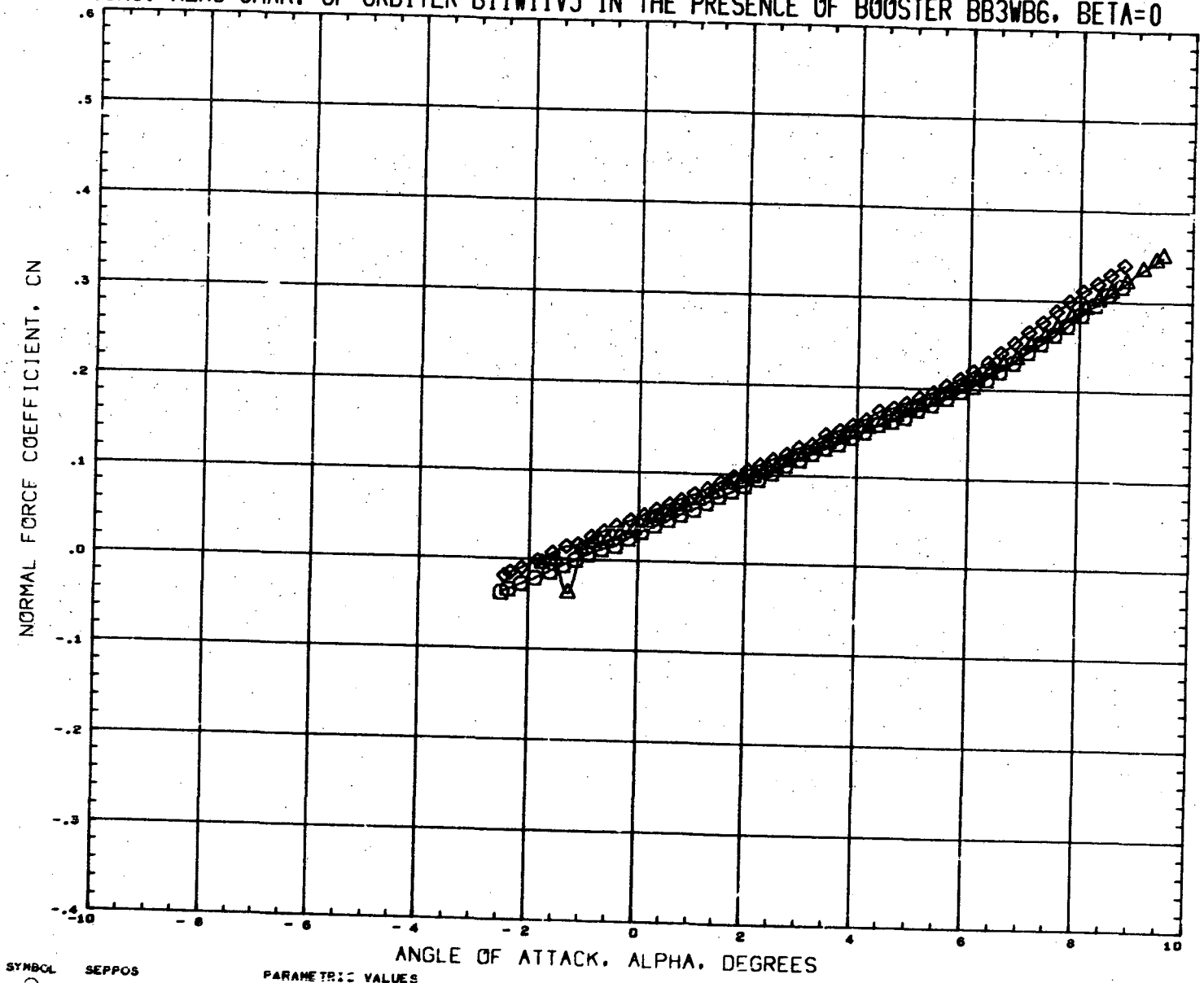
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.041	MACH	0.600	
△	0.008	ALPB	0.166	BETB	- 0.008	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

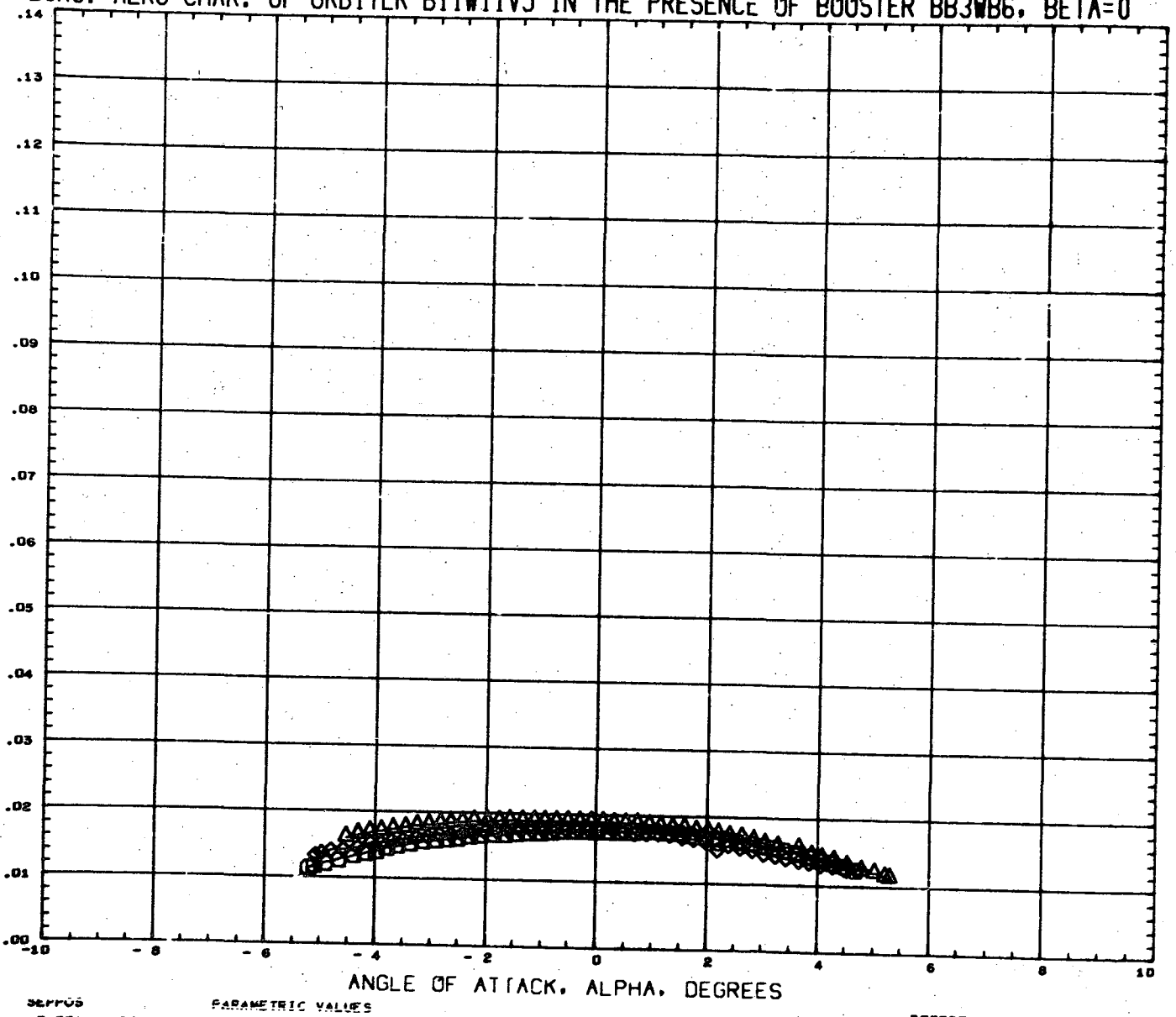
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

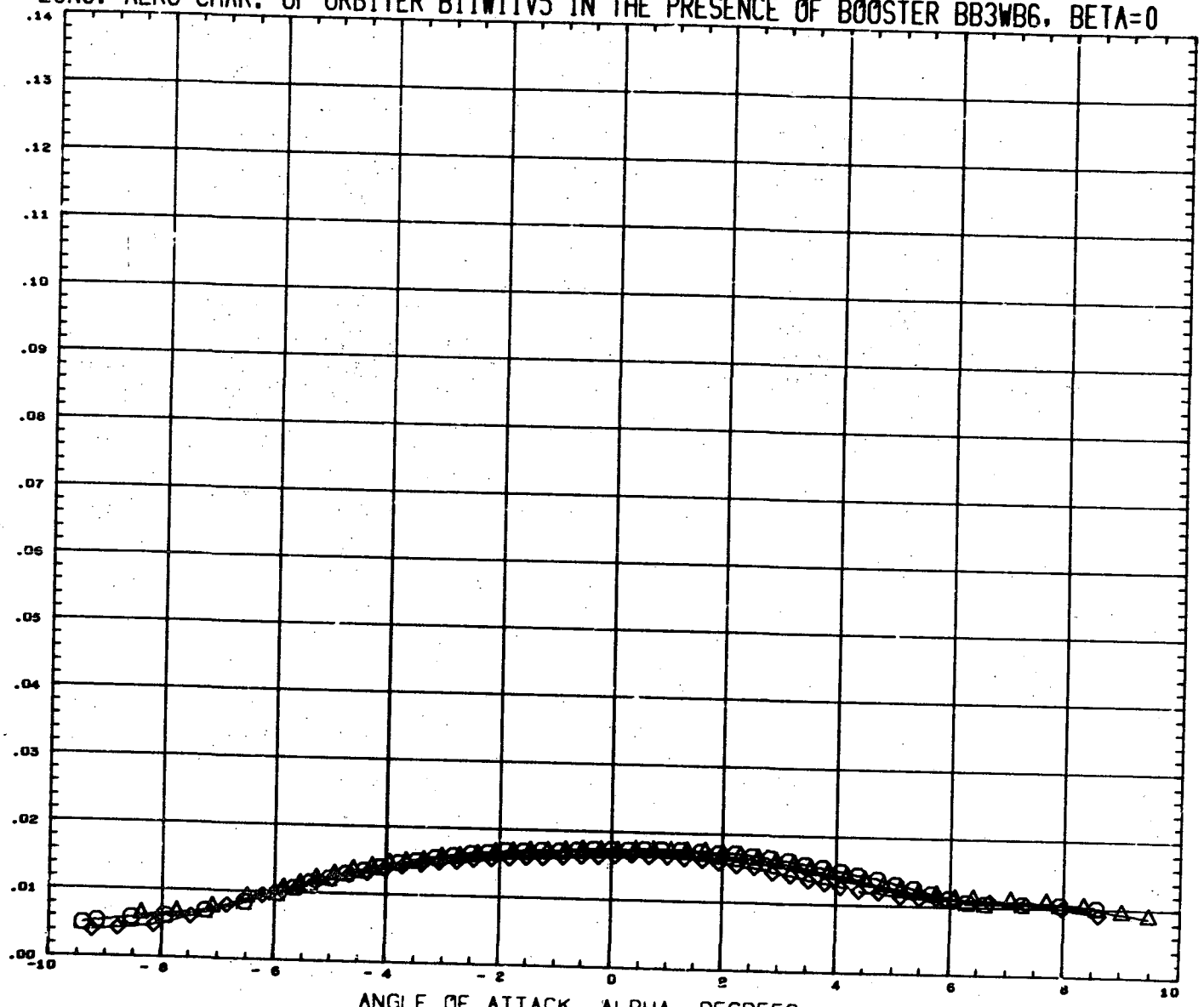
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFFOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

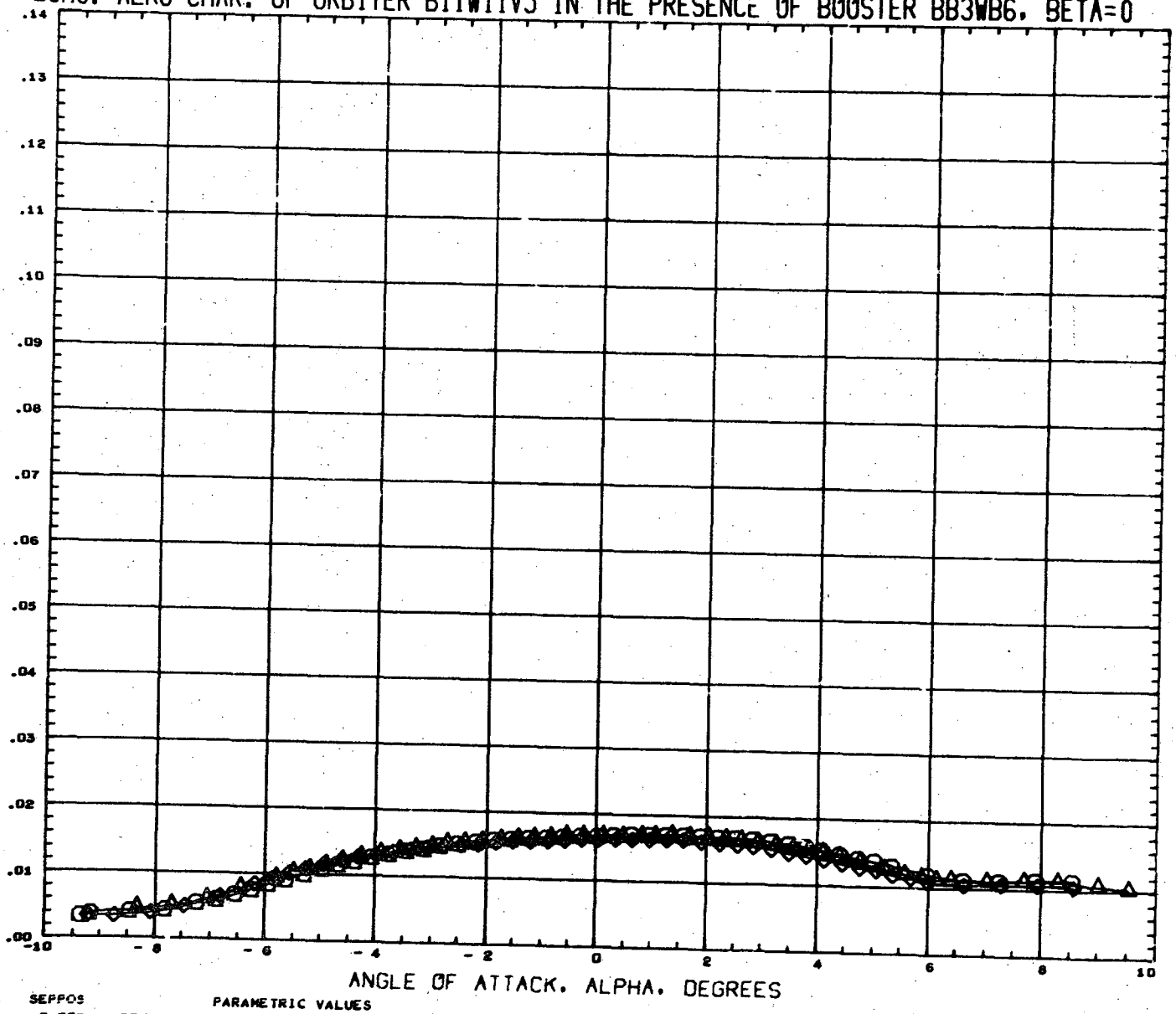
BETA	-	0.041	MACH		0.600
ALPB		0.166	GETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0

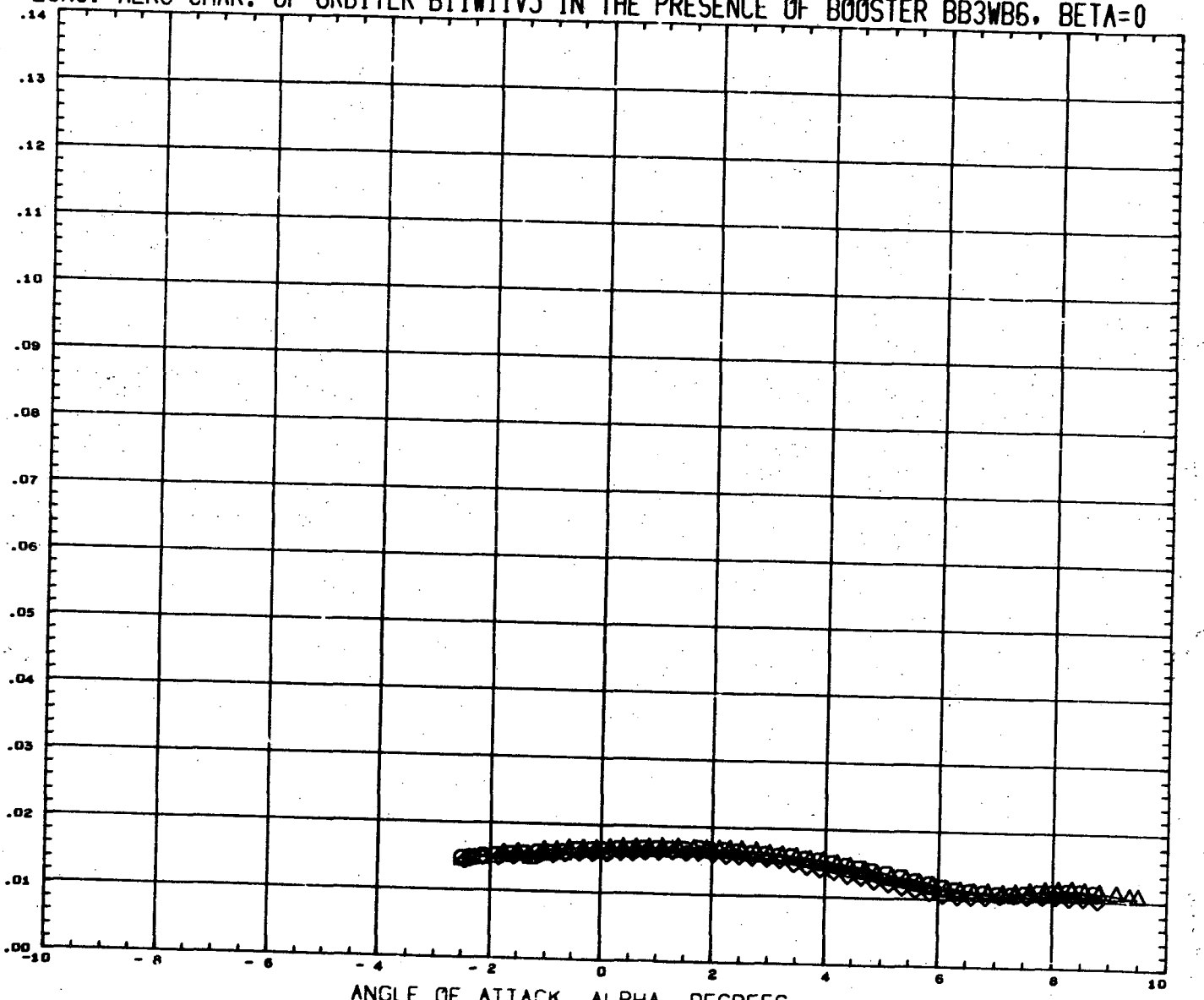


SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.041	MACH	0.600	
△	0.008	ALFB	0.166	BETB	- 0.008	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPTOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

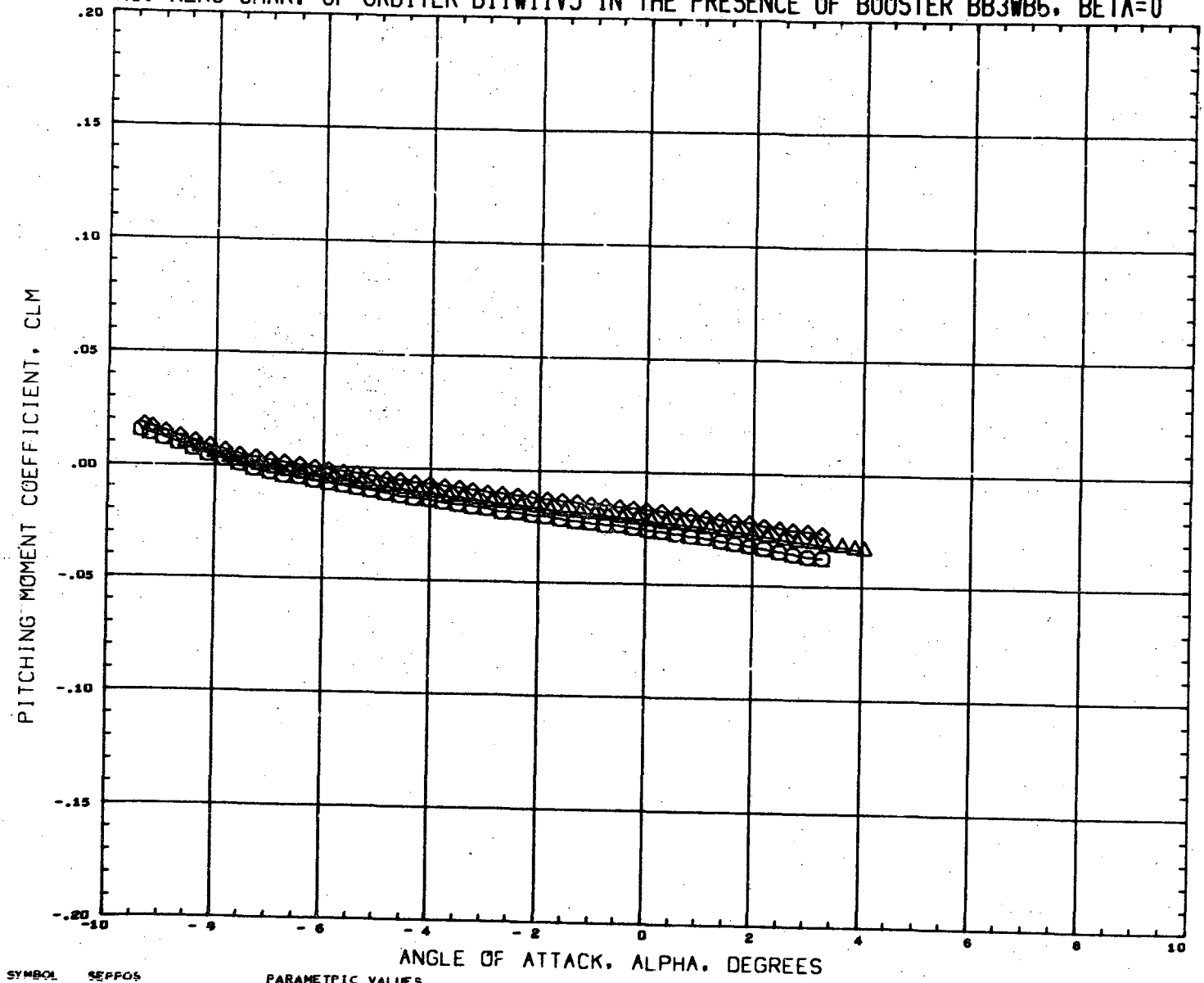
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

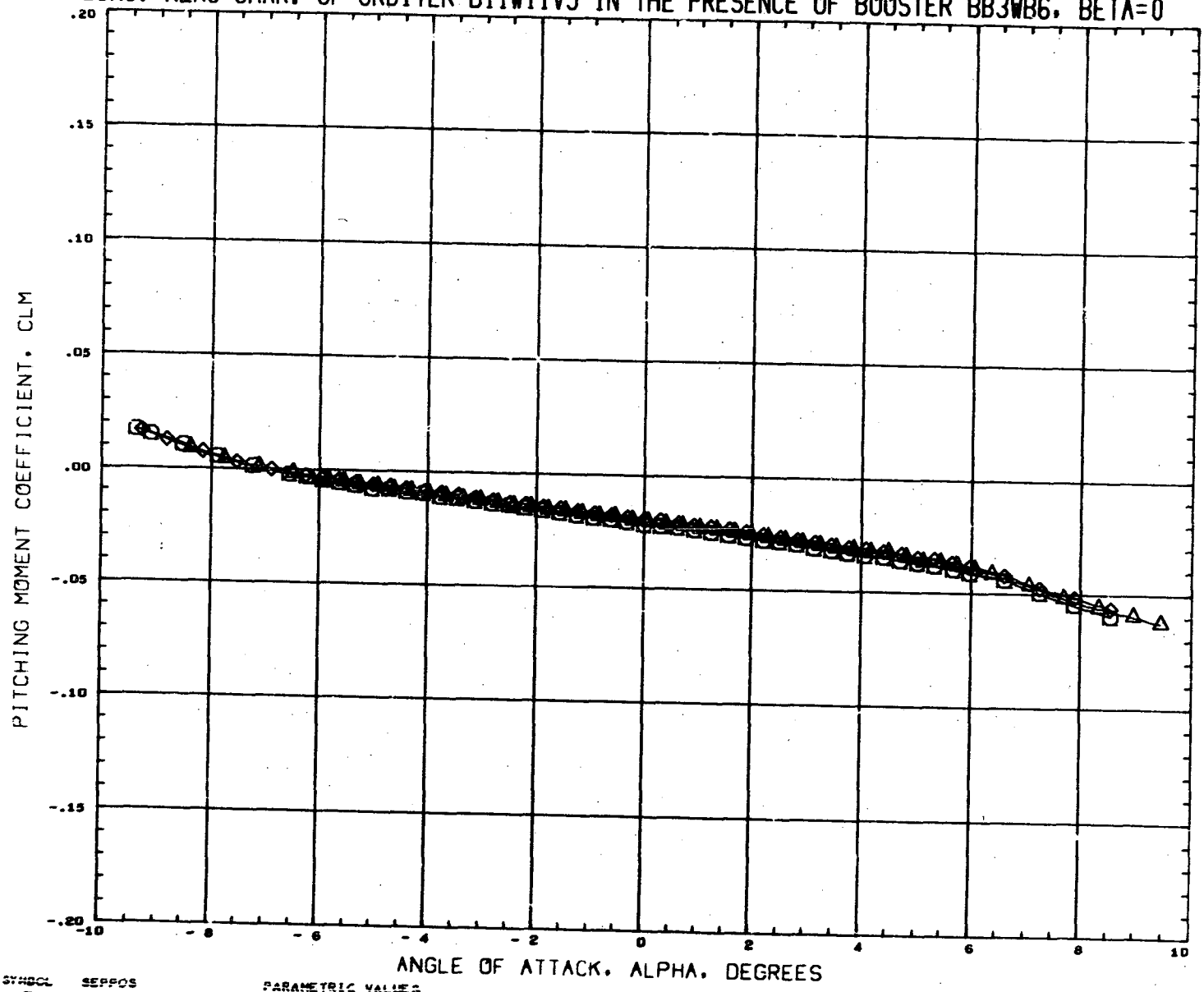
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



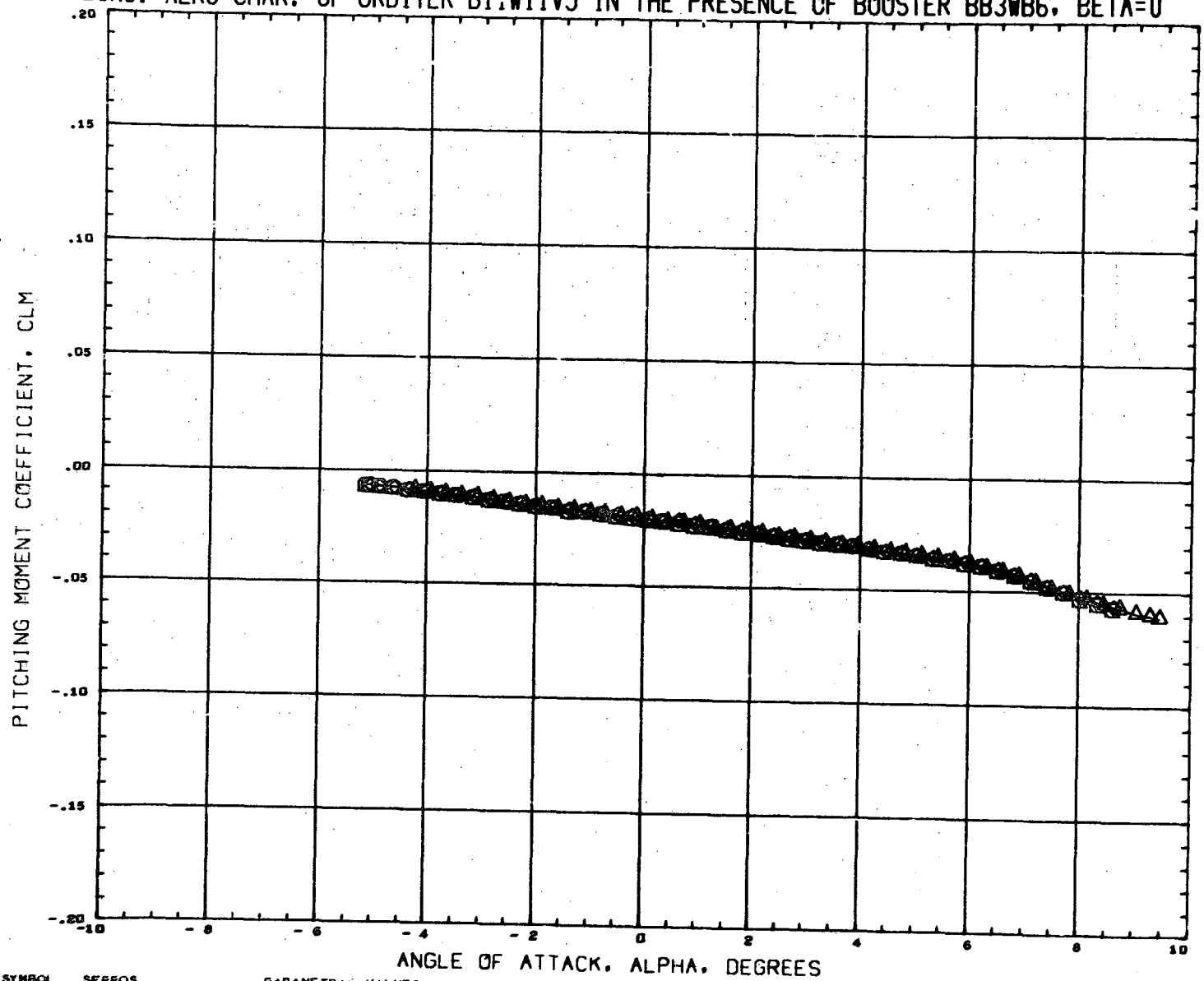
SYMBOL	SEQPOS	PARAMETRIC VALUES			
○	0.007	BETA	- 0.009	MACH	0.590
△	0.008	ALFB	- 5.114	BETB	- 0.007
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3830	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

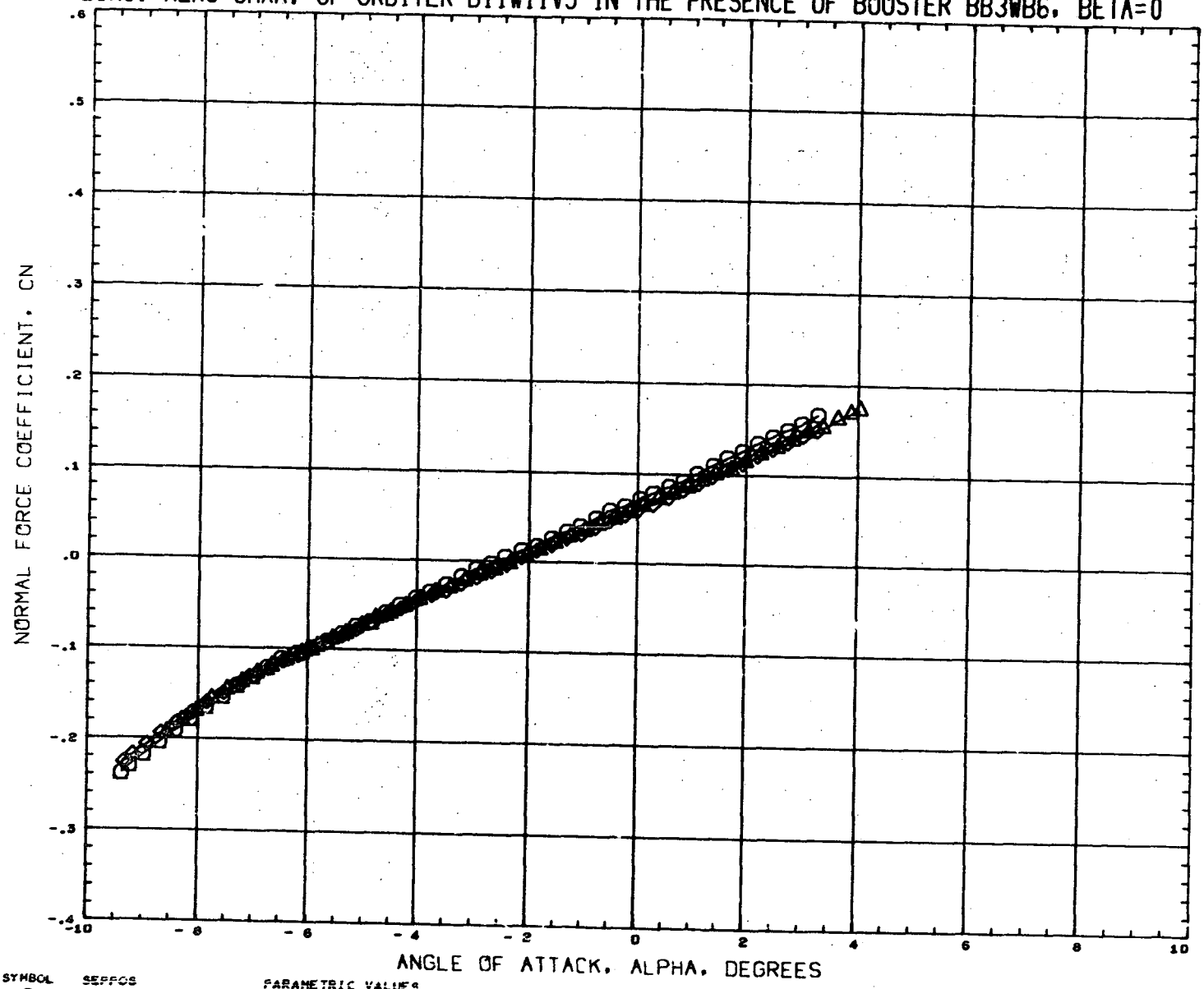
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0086	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0

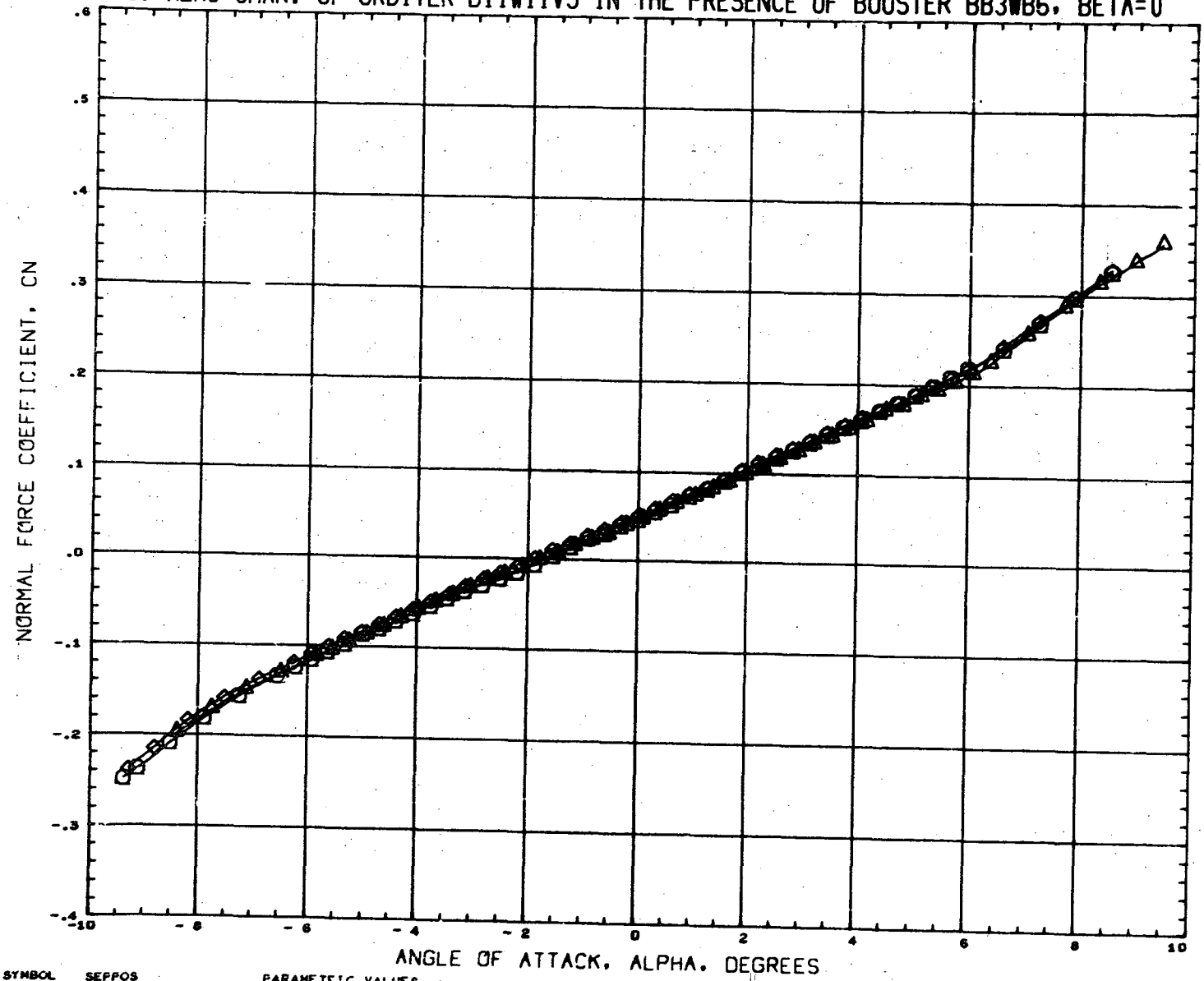


SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.009	MACH	0.590
△	5.005	ALFB	- 5.114	BETB	- 0.007
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



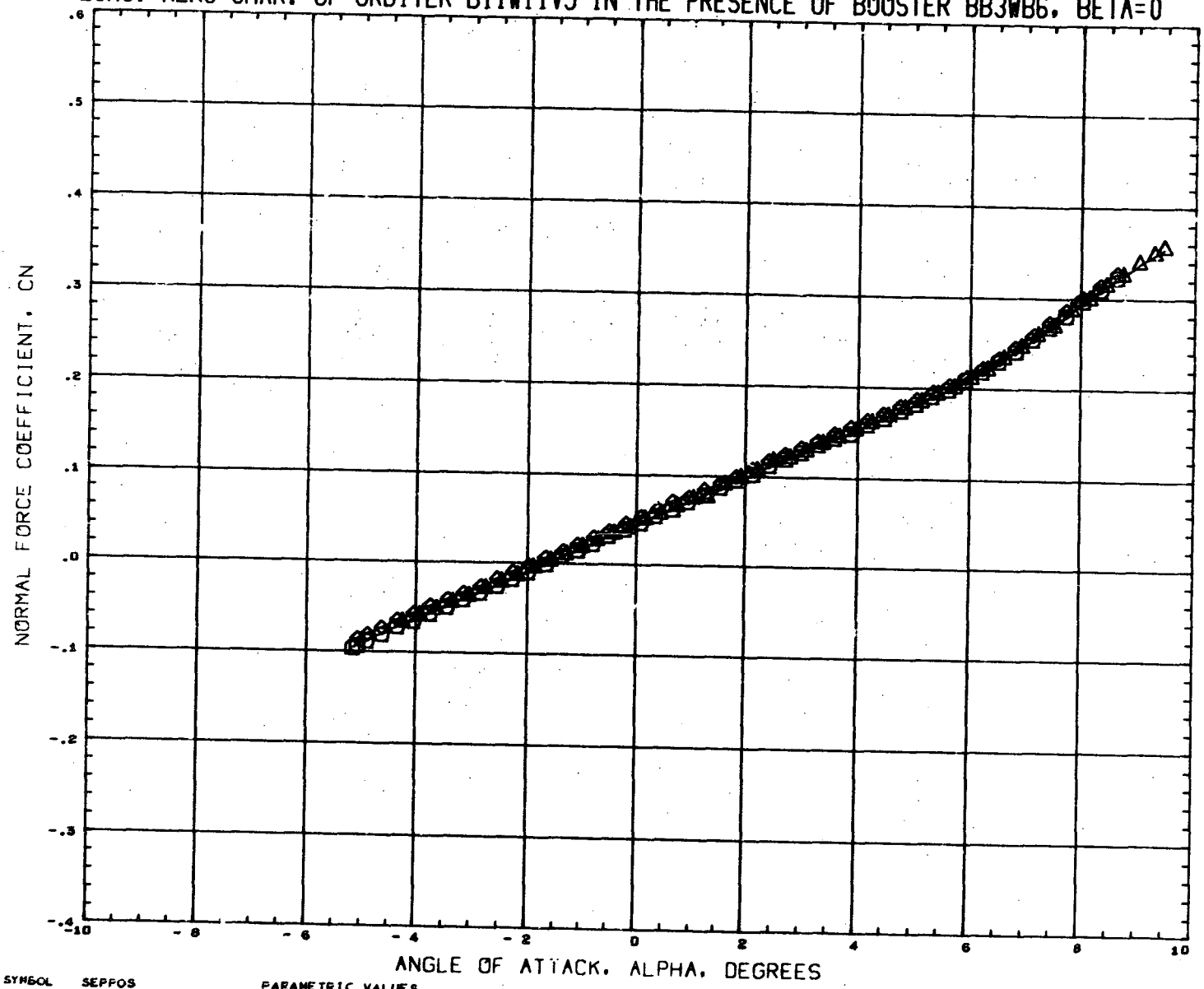
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.009	MACH	0.590	
△	0.008	ALFB	- 5.114	BETB	- 0.007	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

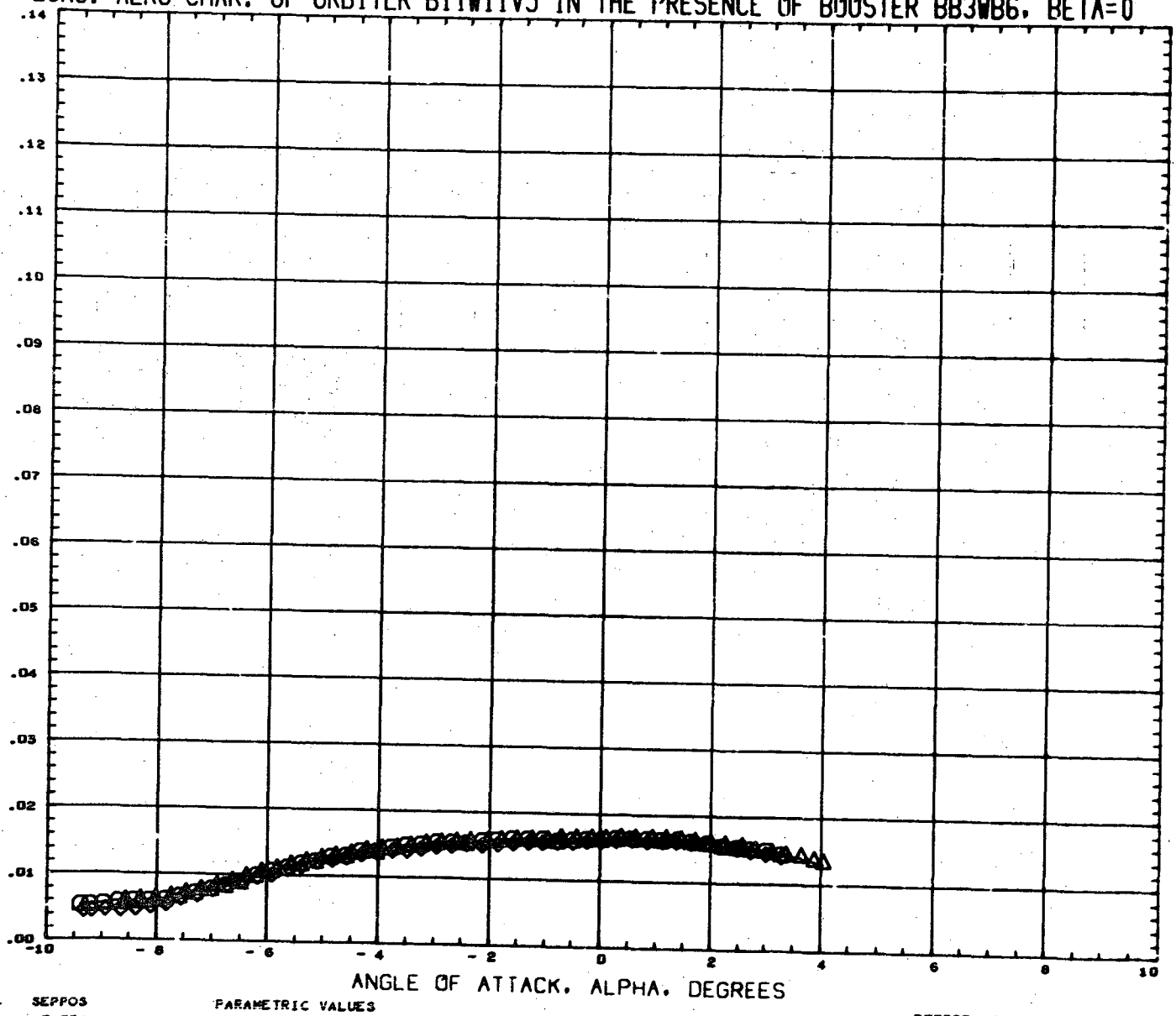
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

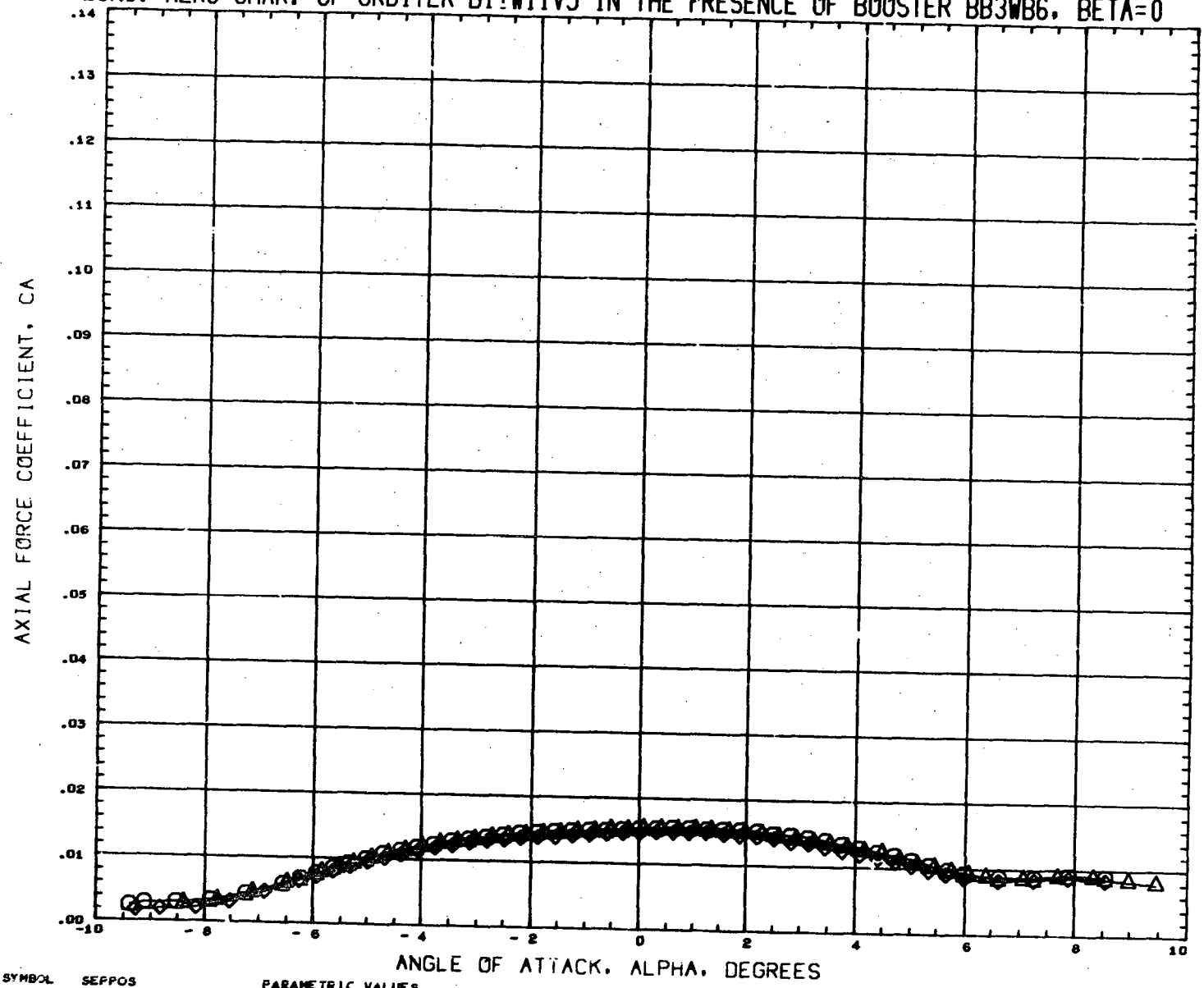
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.6820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

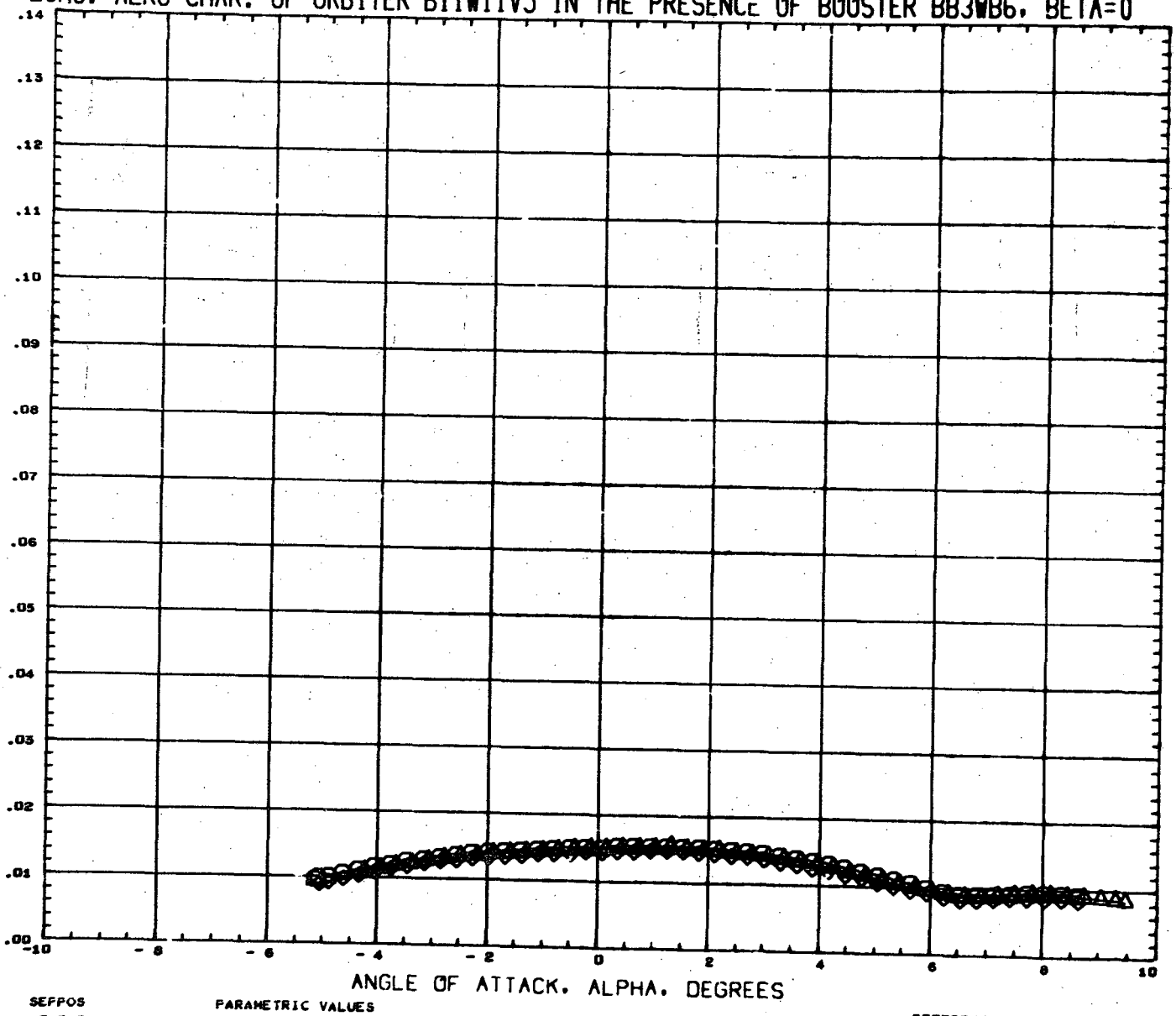
BETA	-	0.009	MACH		0.590
ALFB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

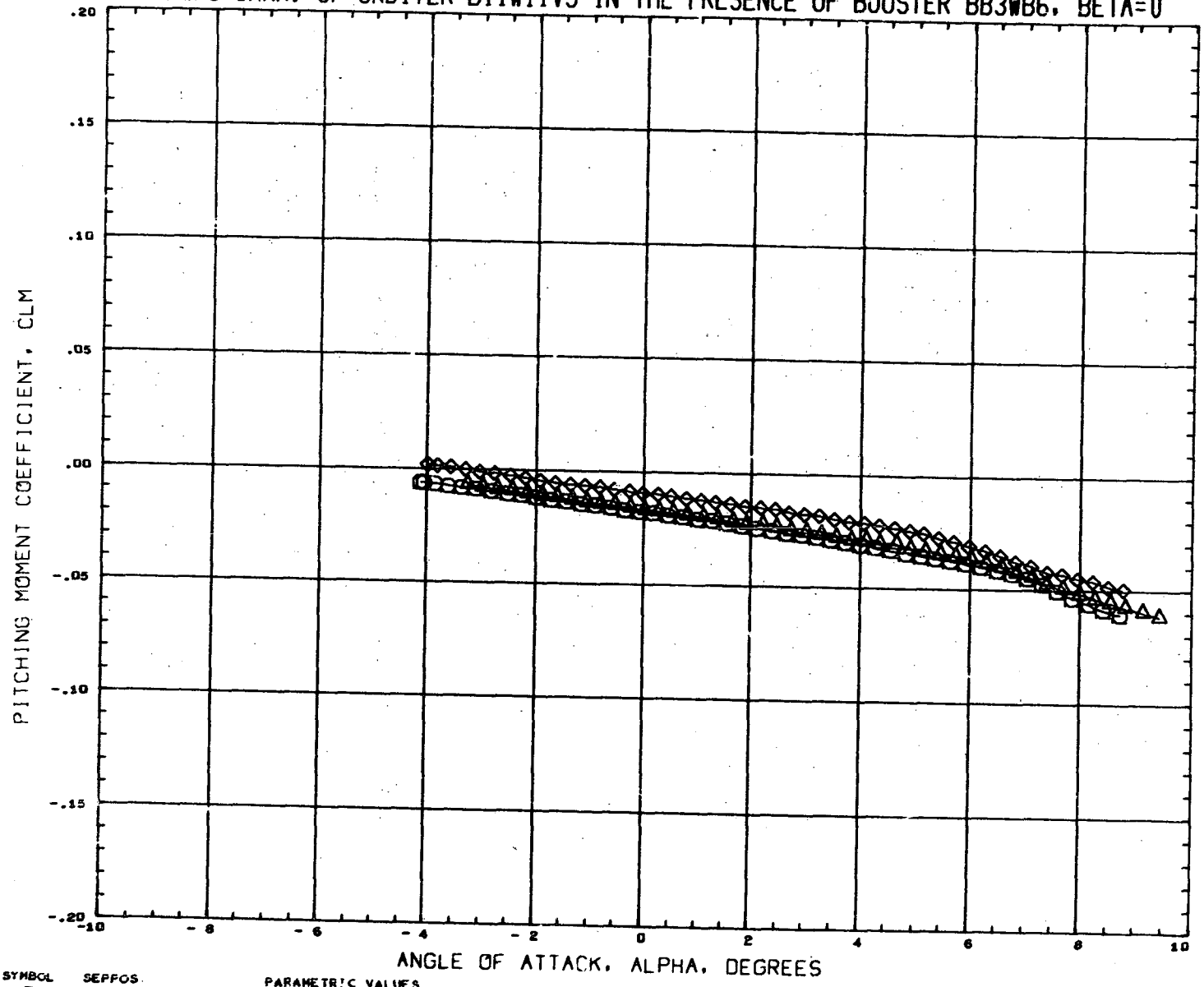
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.0820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



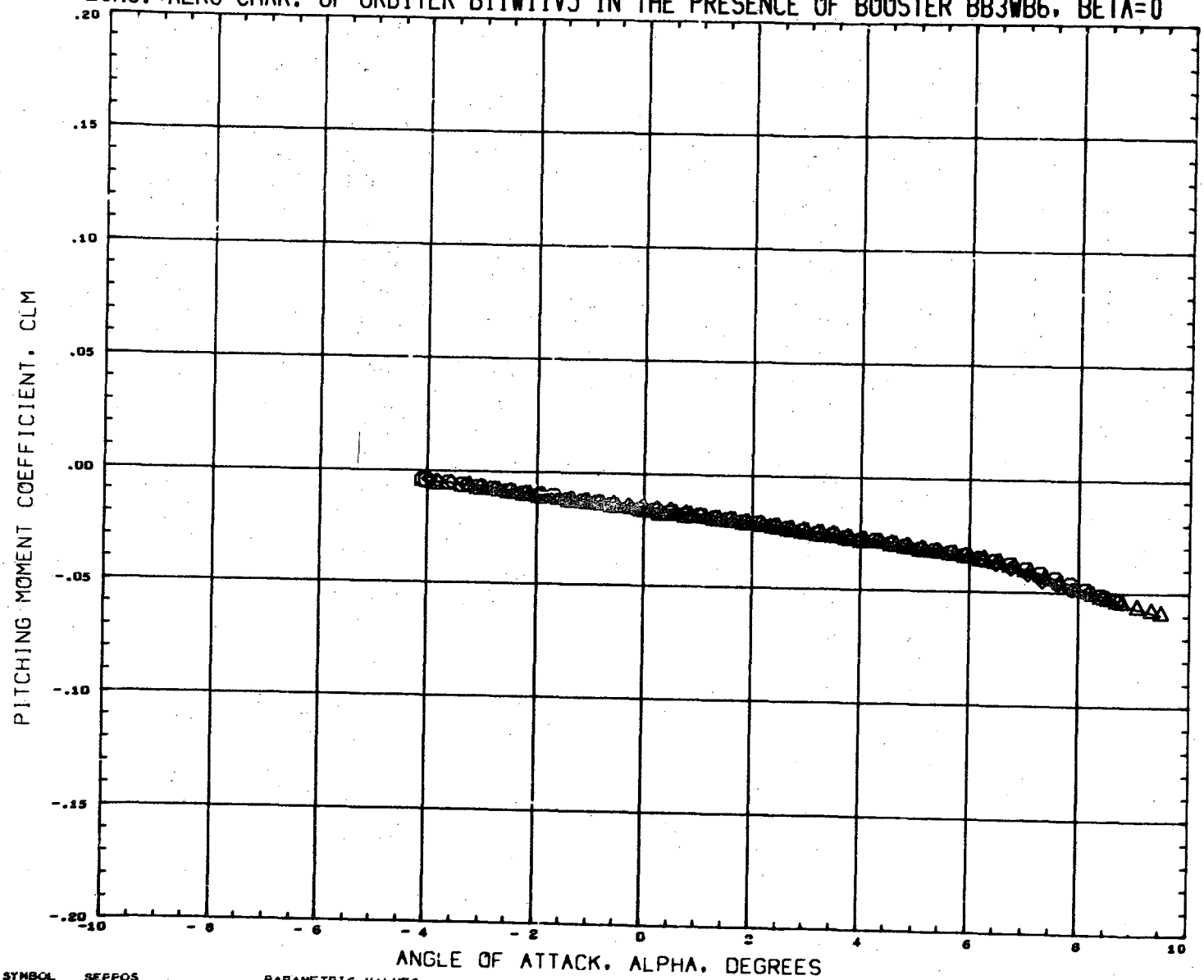
SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.004	BETA	0.119	MACH		0.600
△	0.005	ALPB	3.772	BETB	-	0.006
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



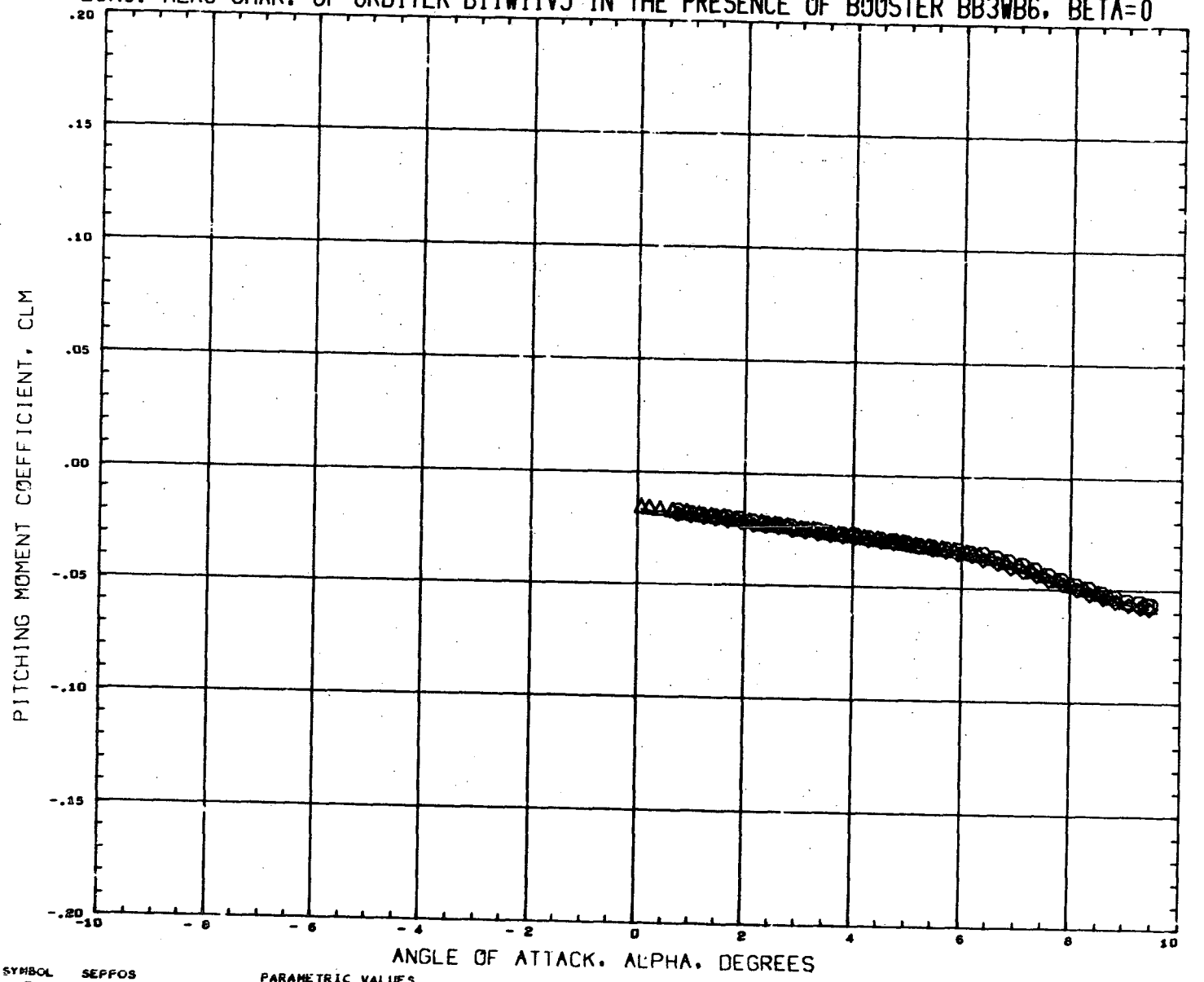
SYMBOL	SEFPOS		PARAMETRIC VALUES		
▽	0.007	BETA	0.119	MACH	0.600
△	0.008	ALPB	3.772	BETB	- 0.006
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3886	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



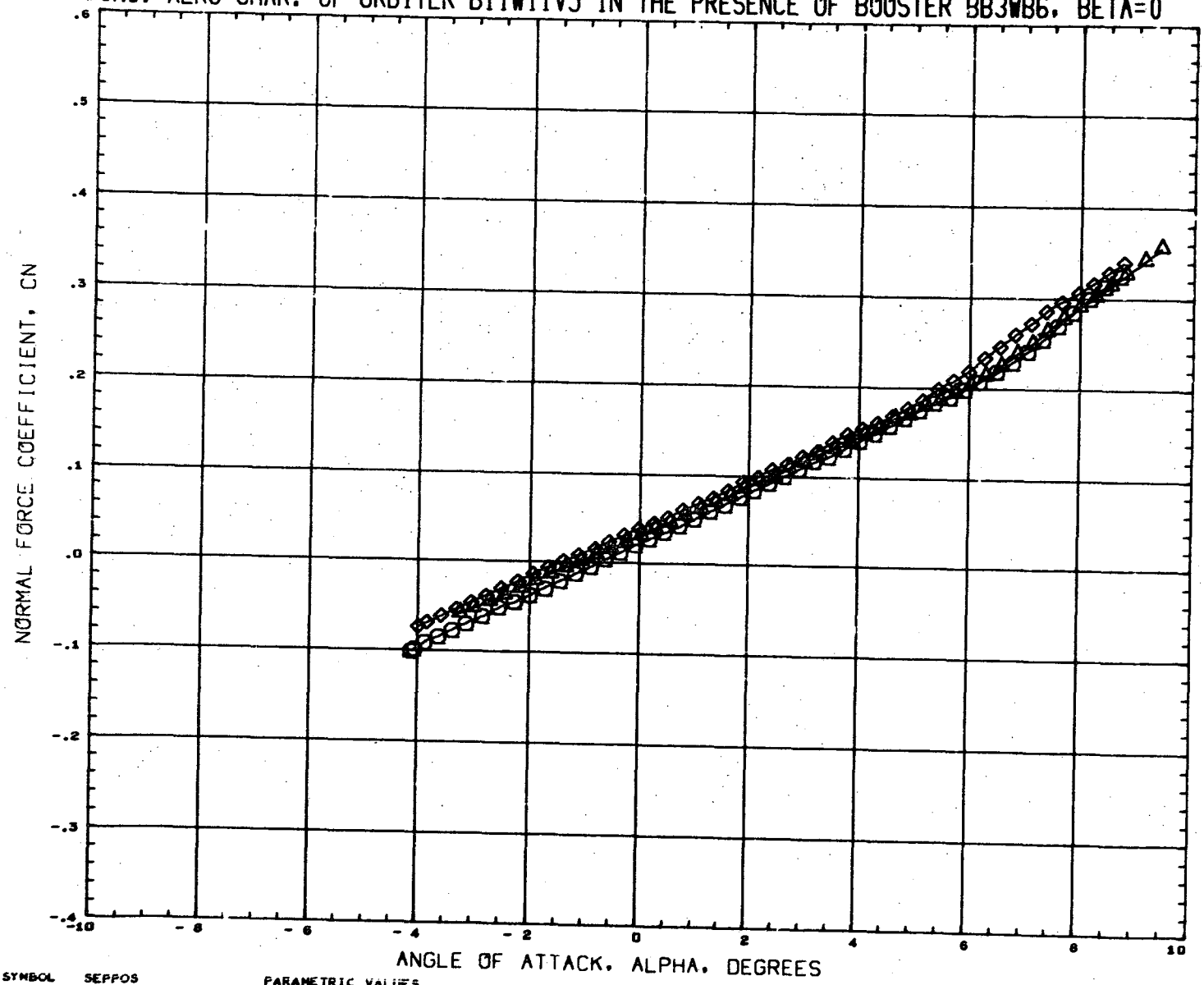
SYMBOL	SEPFOS		PARAMETRIC VALUES		
○	0.010	BETA	0.119	MACH	0.600
△	0.011	ALPB	3.772	BETB	- 0.006
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.6820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

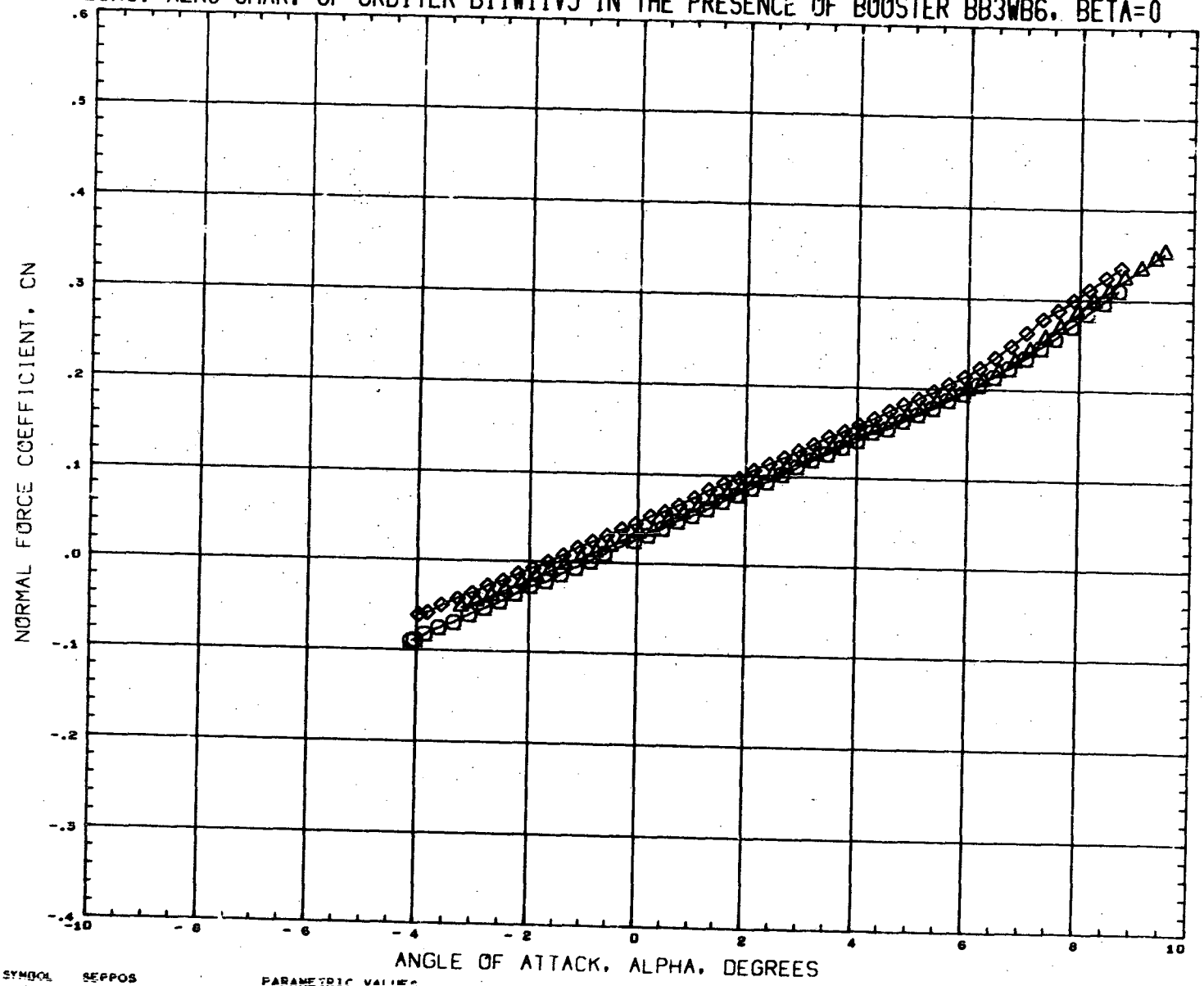
BETA	0.319	MACH		0.600
ALFB	3.772	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

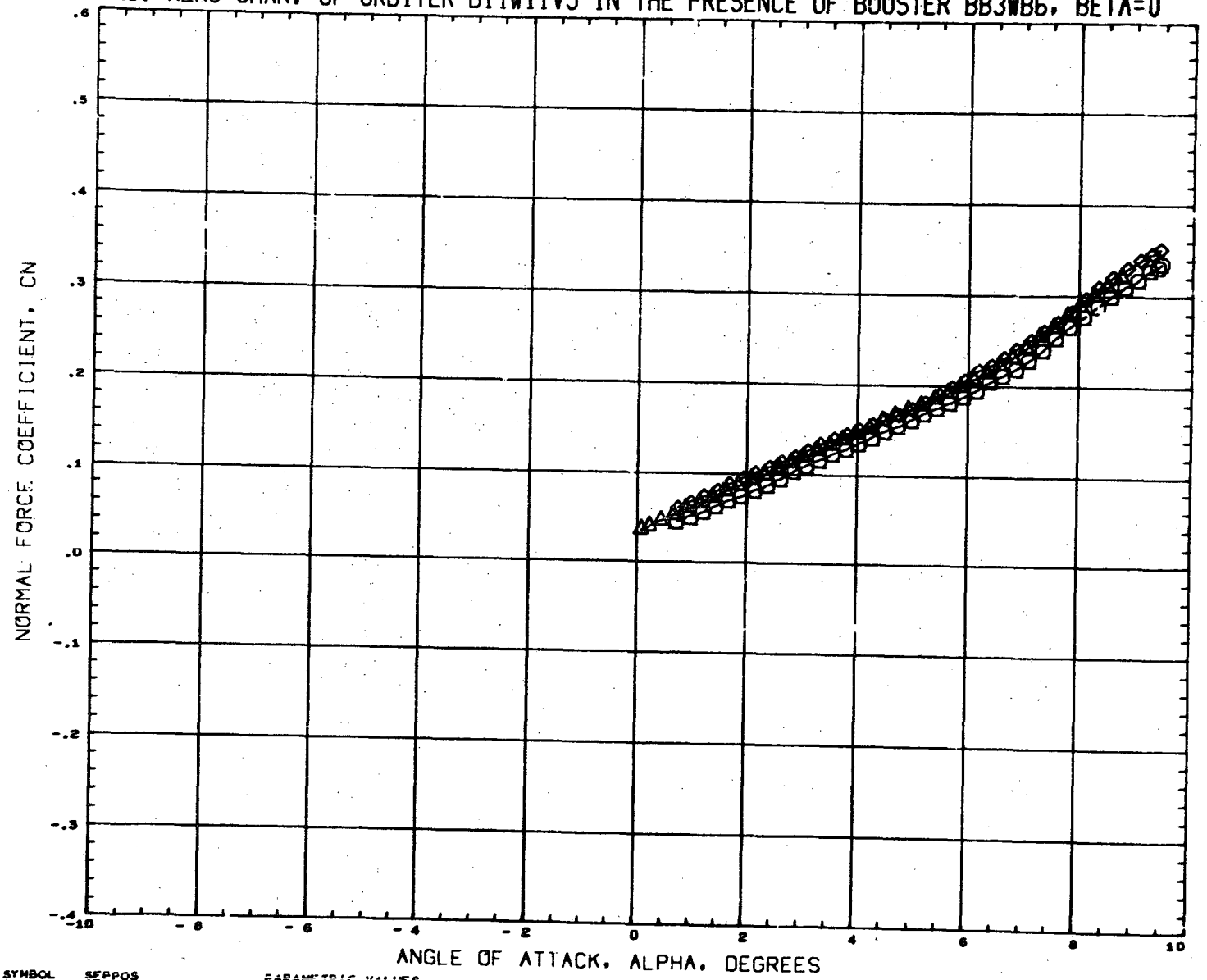
BETA	0.119	MACH	0.600
ALFB	3.772	BETB	- 0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

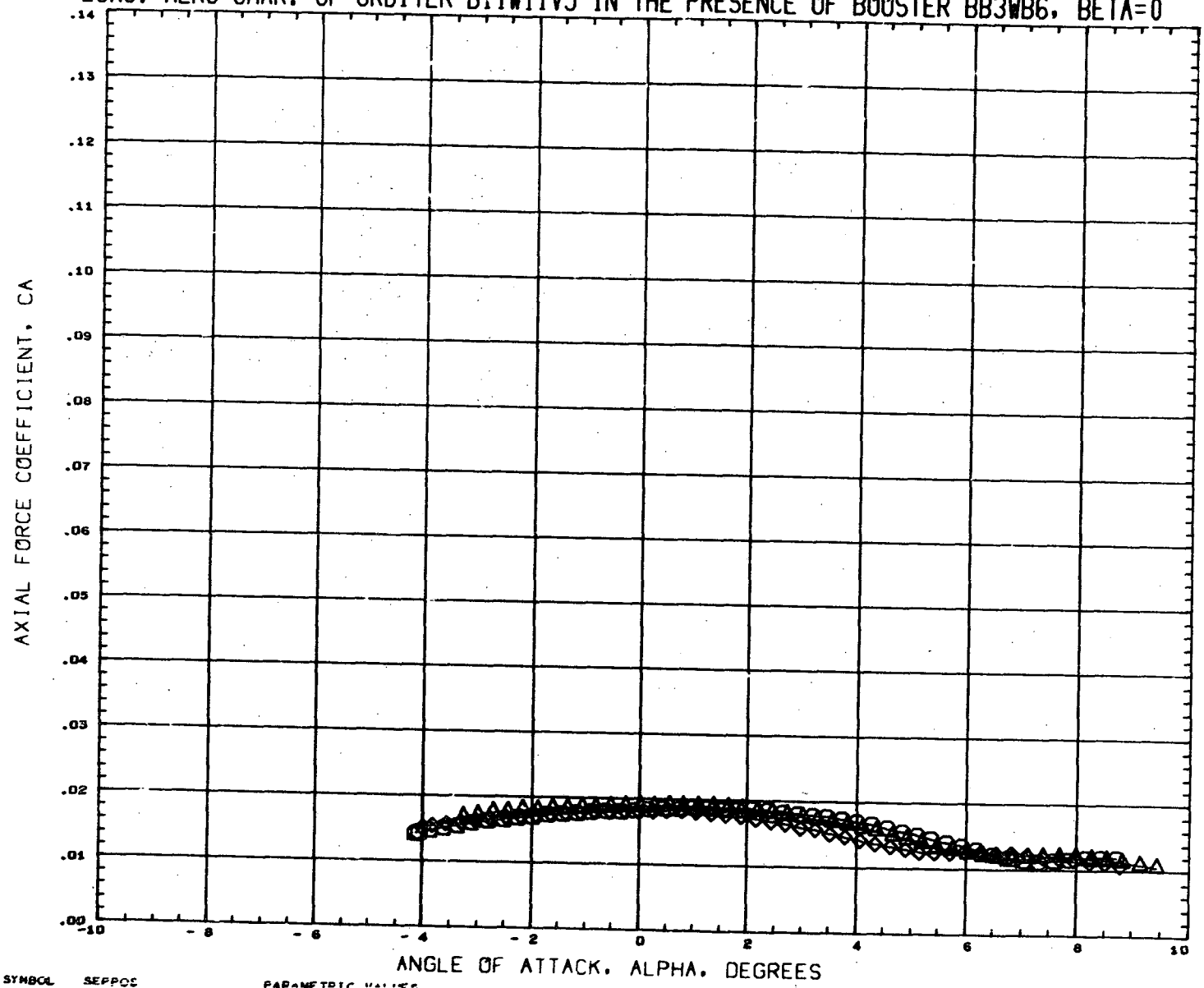
BETA	0.119	MACH		0.600
ALFB	3.772	BETB	-	0.006

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8020	IN
BREF	8.0750	IN
XMRP	9.3080	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



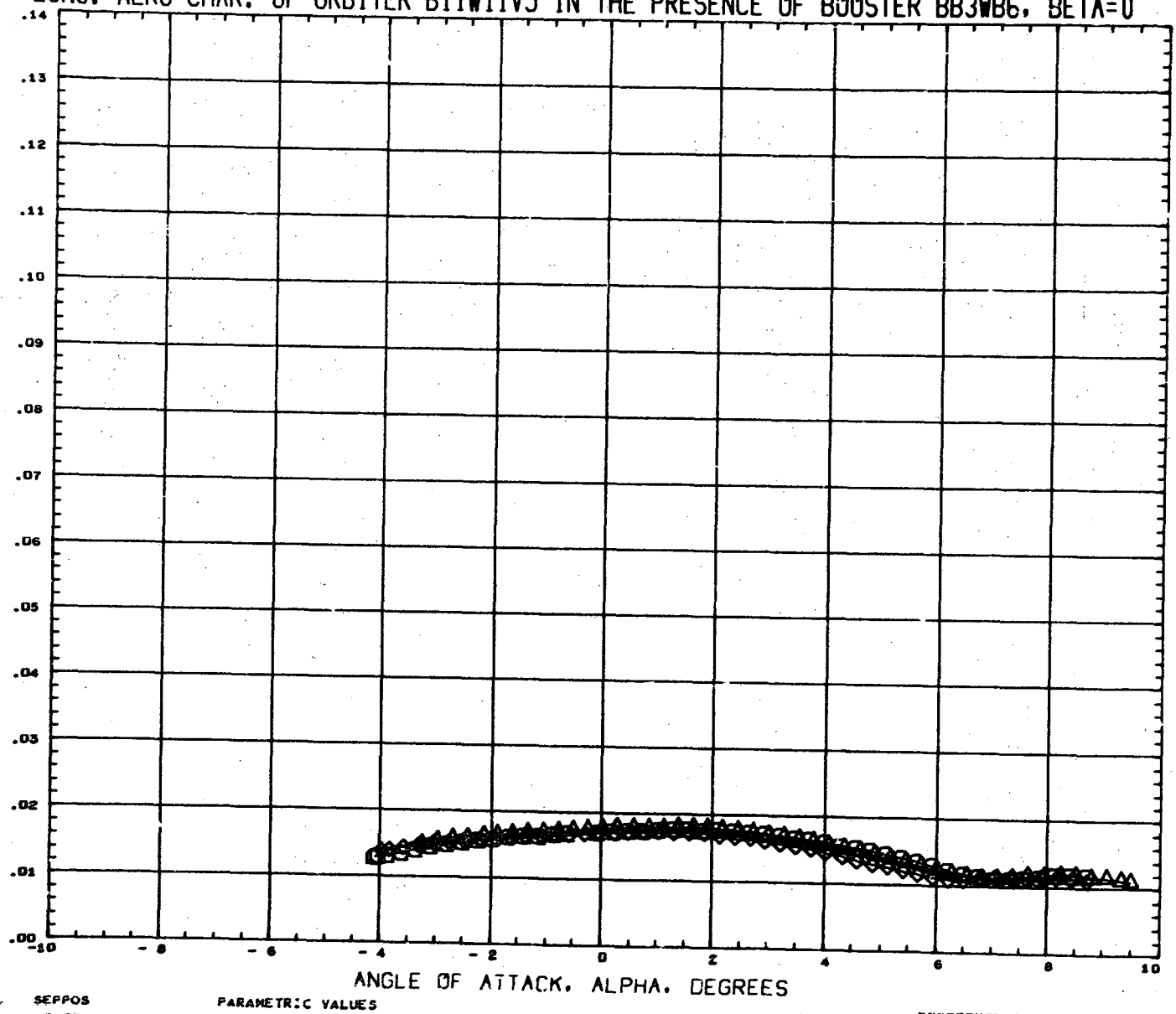
SYMBOL	SEPPOS		PARAMETRIC VALUES		
◇	0.004	BETA	0.119	MACH	0.600
△	0.005	ALPB	3.772	BETB	- 0.006
○	0.006				

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

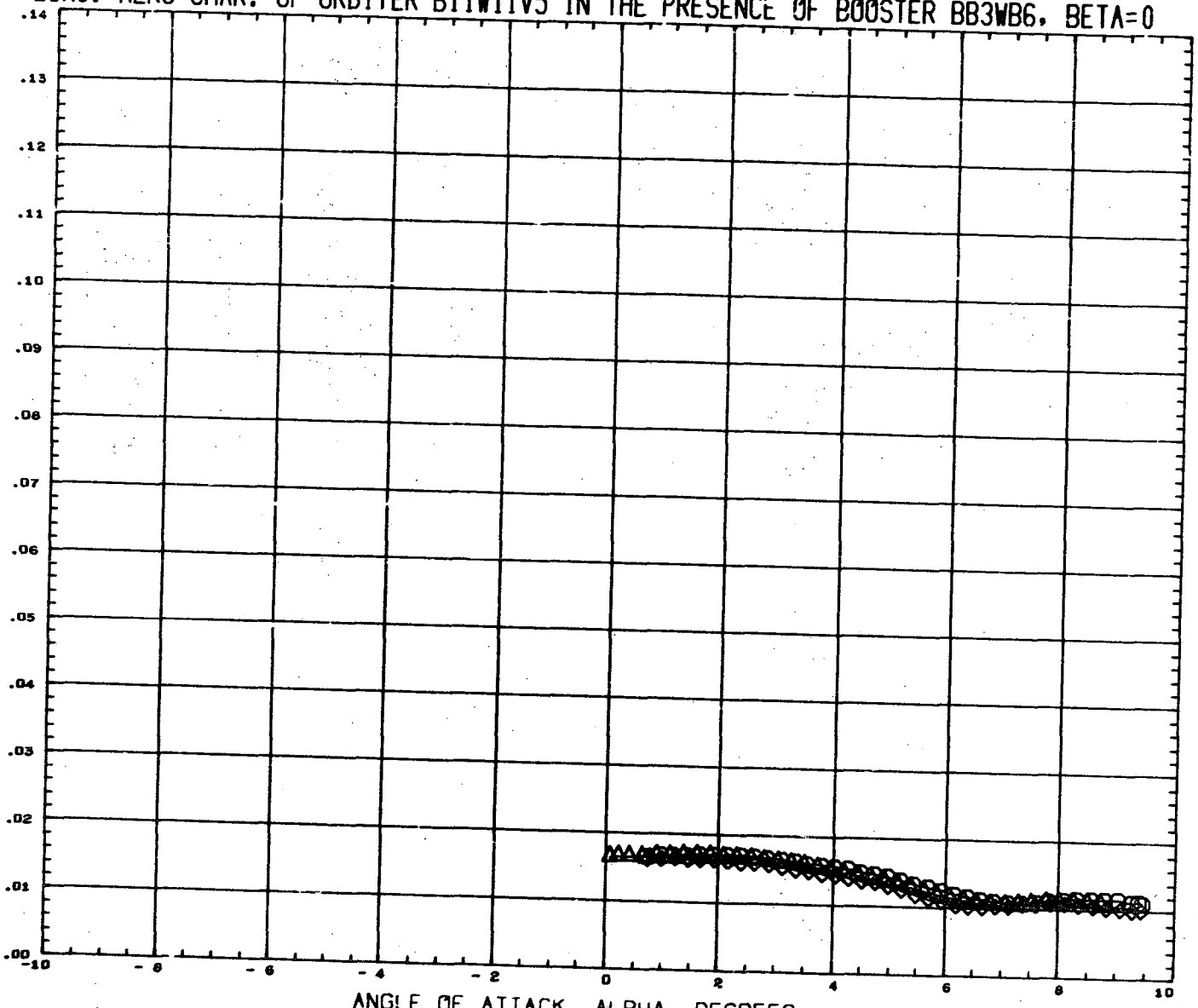
BETA	0.119	MACH	0.600		
ALPB	3.772	DETB	- 0.006		

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



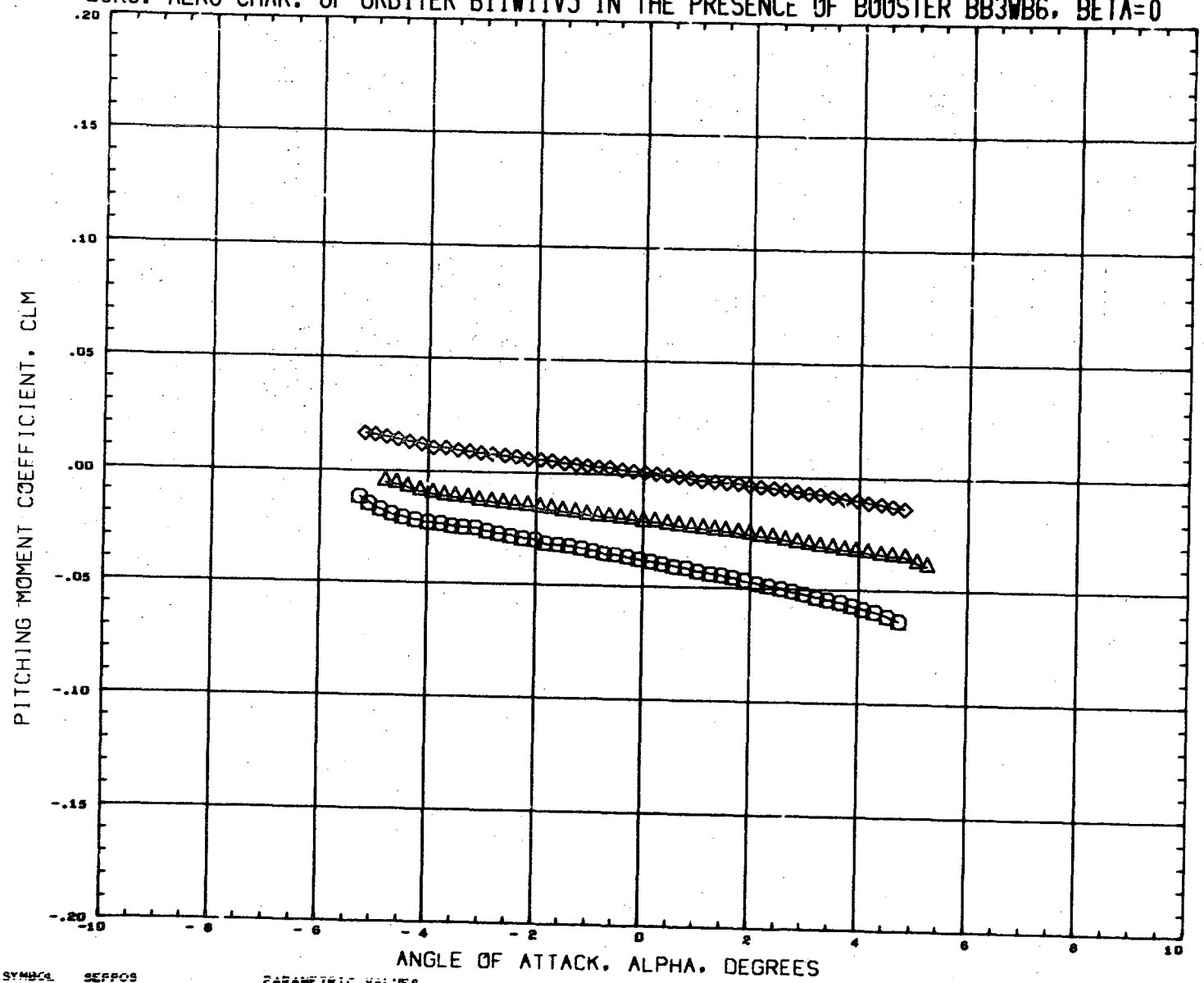
SYMBOL	SEPPOS		PARAMETRIC VALUES		
○	0.010	BETA	0.119	MACH	0.600
△	0.011	ALPB	3.772	BETB	- 0.006
◇	0.012				

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8020	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	DELPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

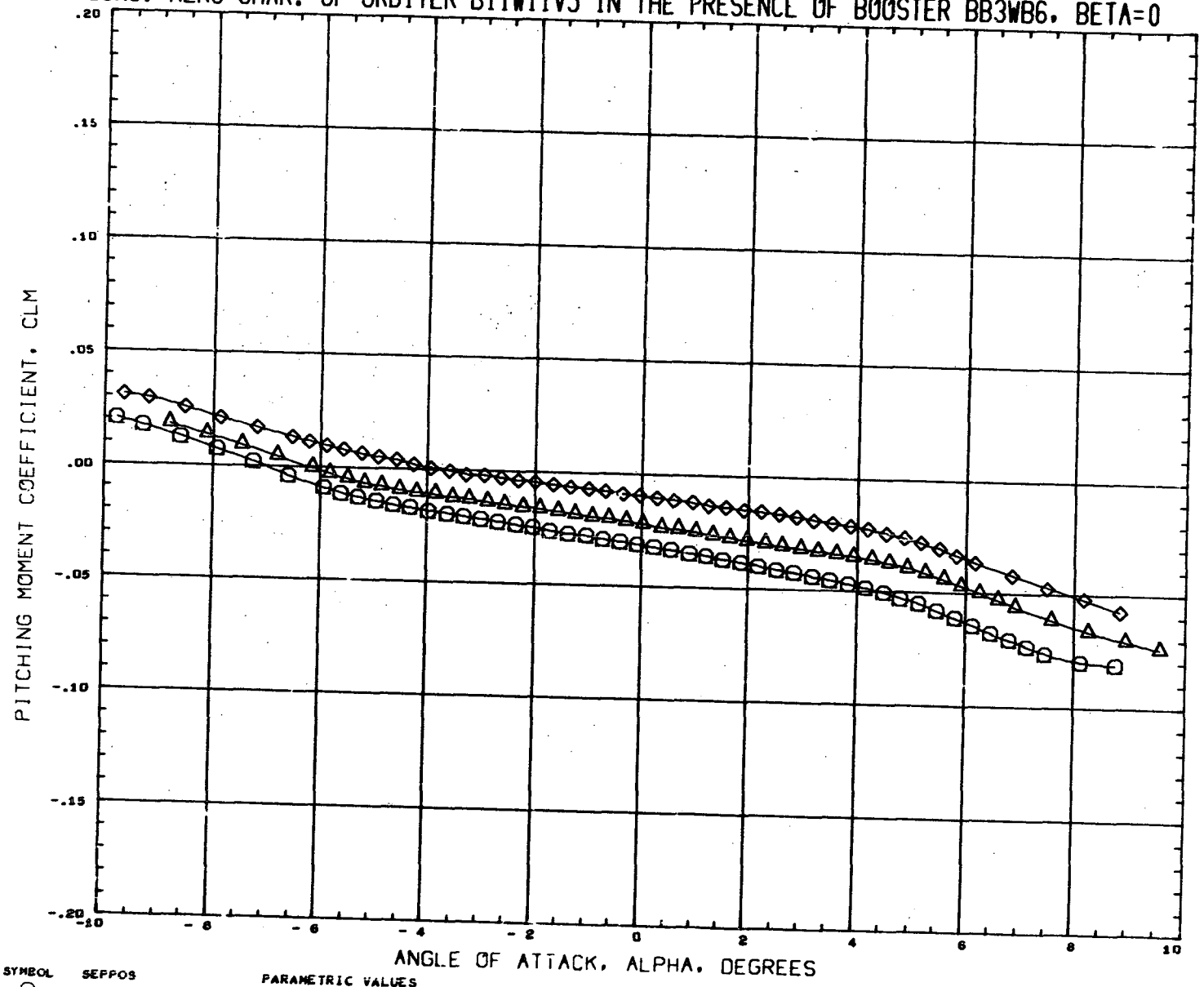
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3800	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



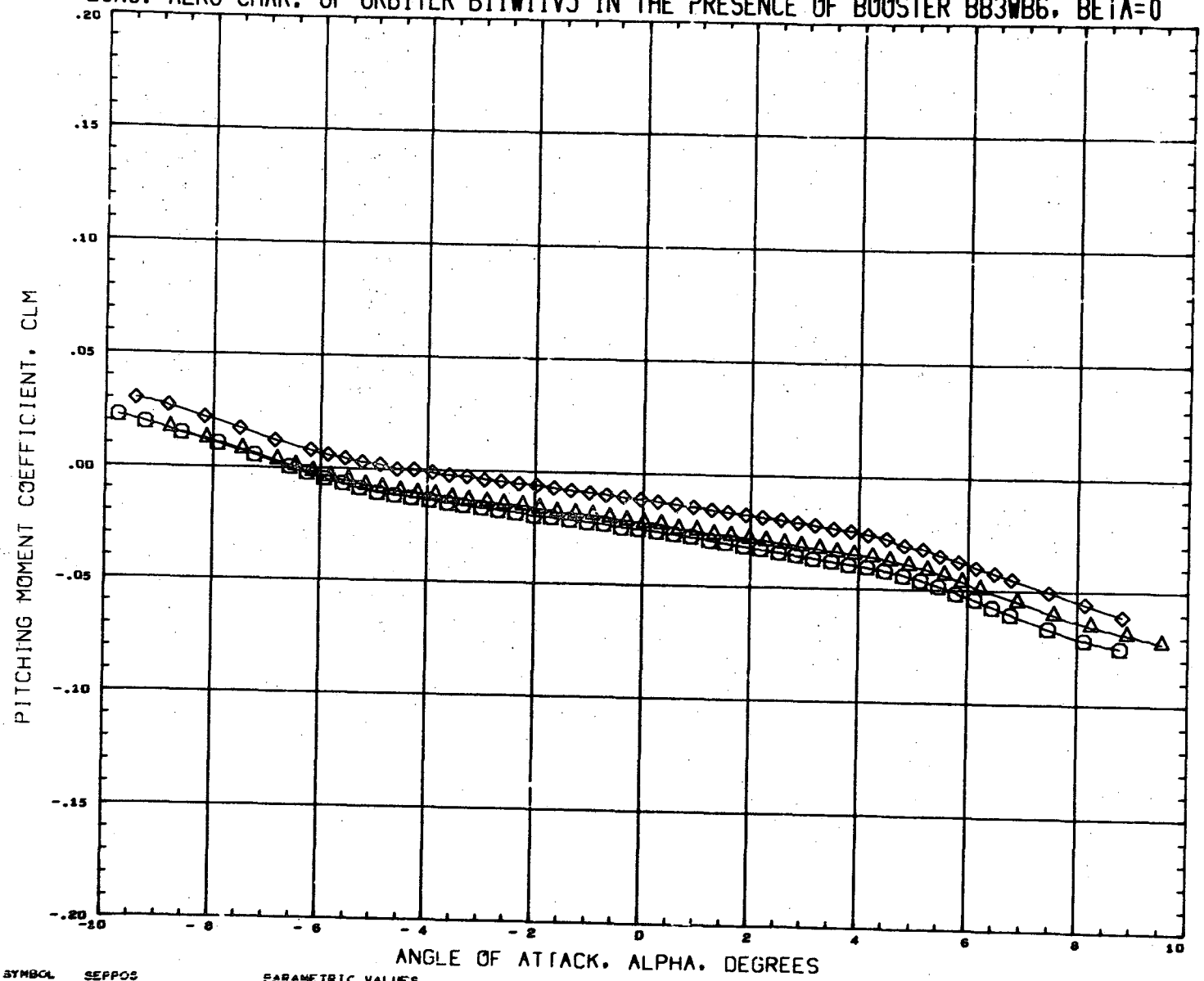
SYMBOL	SEPPOS		PARAMETRIC VALUES		
○	0.004	BETA	- 0.036	MACH	0.890
△	0.005	ALPB	0.223	BETB	- 0.010
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
◇	0.007
△	0.008
○	0.009

PARAMETRIC VALUES

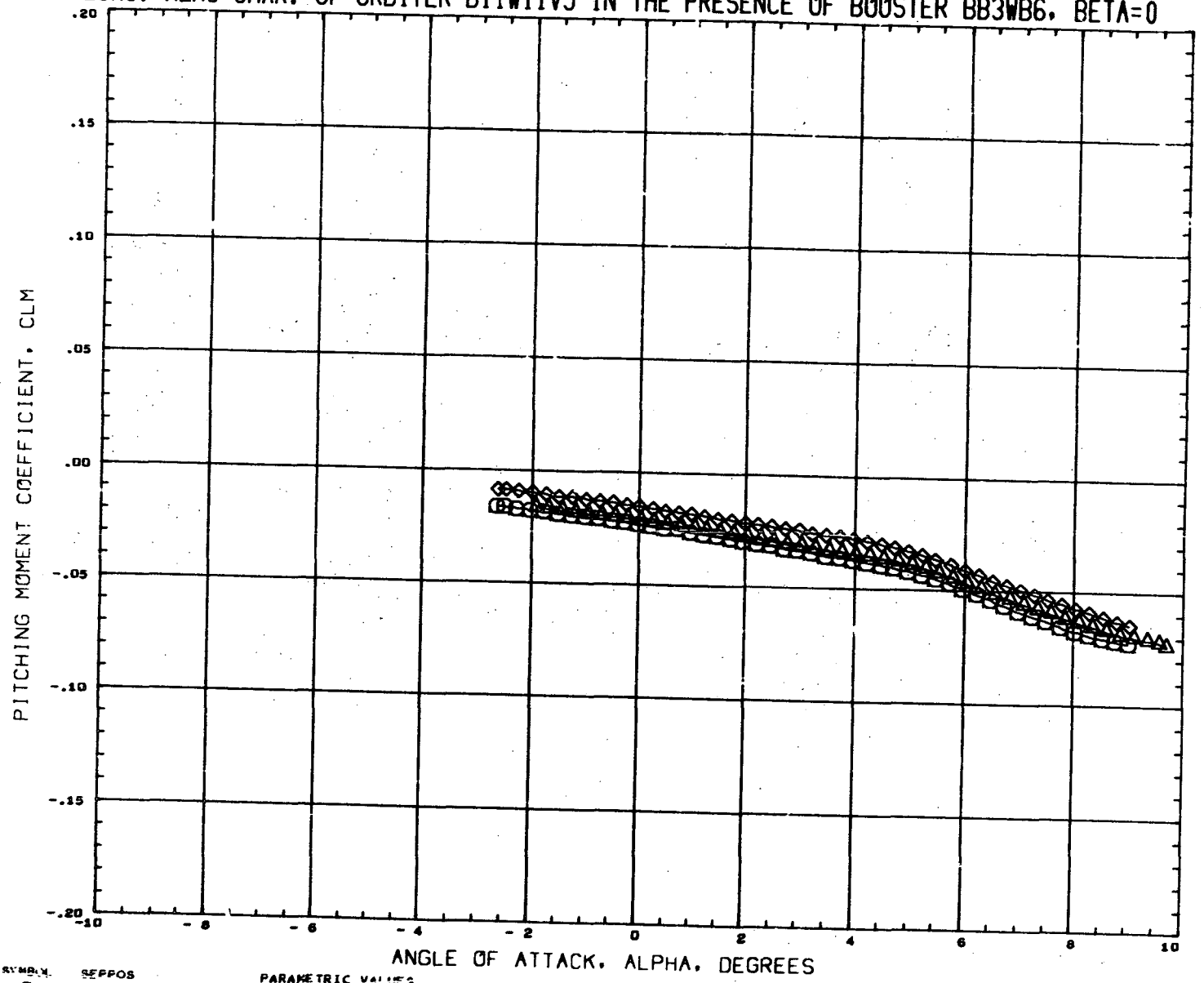
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
△	0.010
○	0.011
◇	0.012

PARAMETRIC VALUES

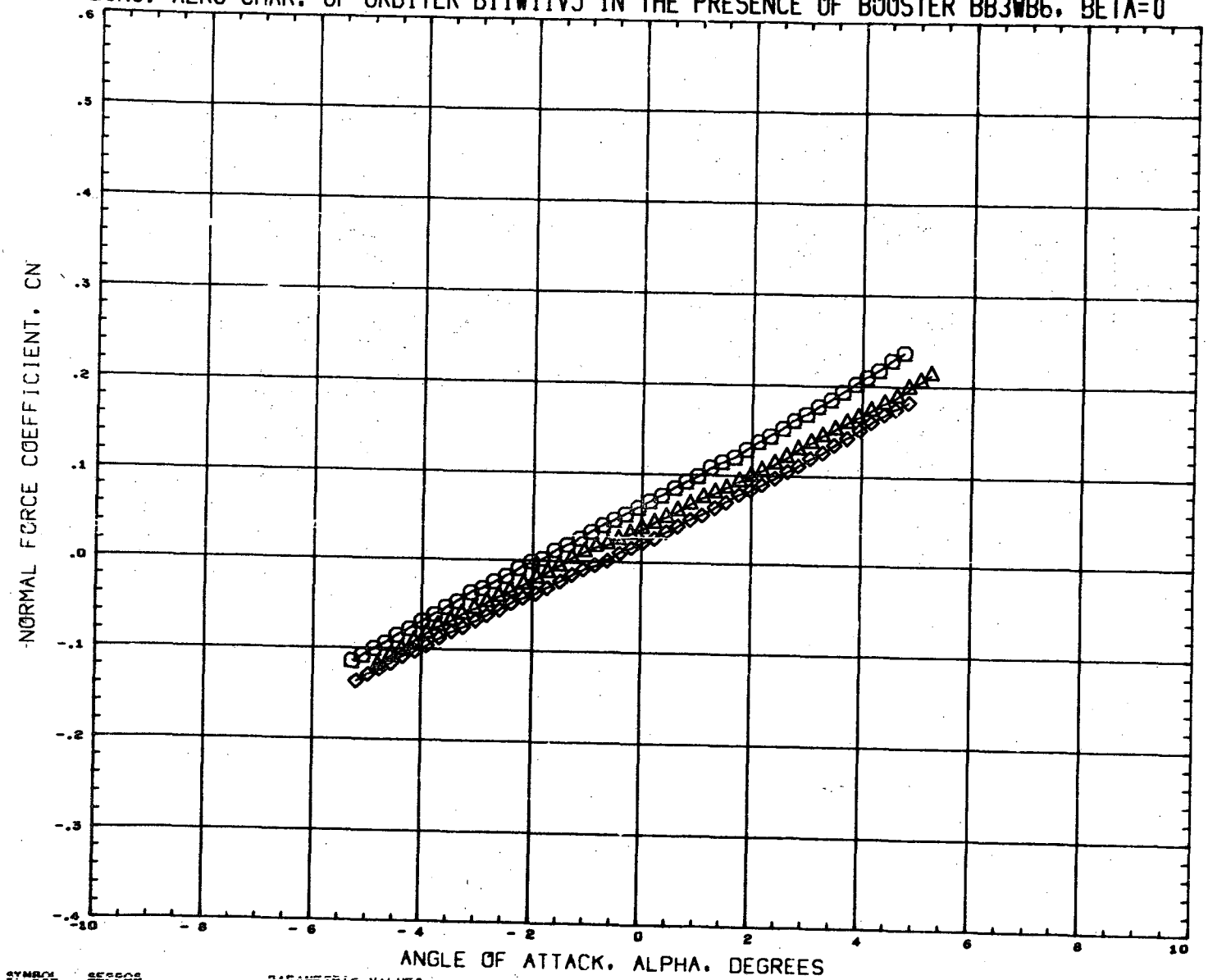
BETA	- 0.036	MACH	0.890
ALPB	0.223	BETB	- 0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8020	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEQPOS
○	0.001
△	0.002
◇	0.003

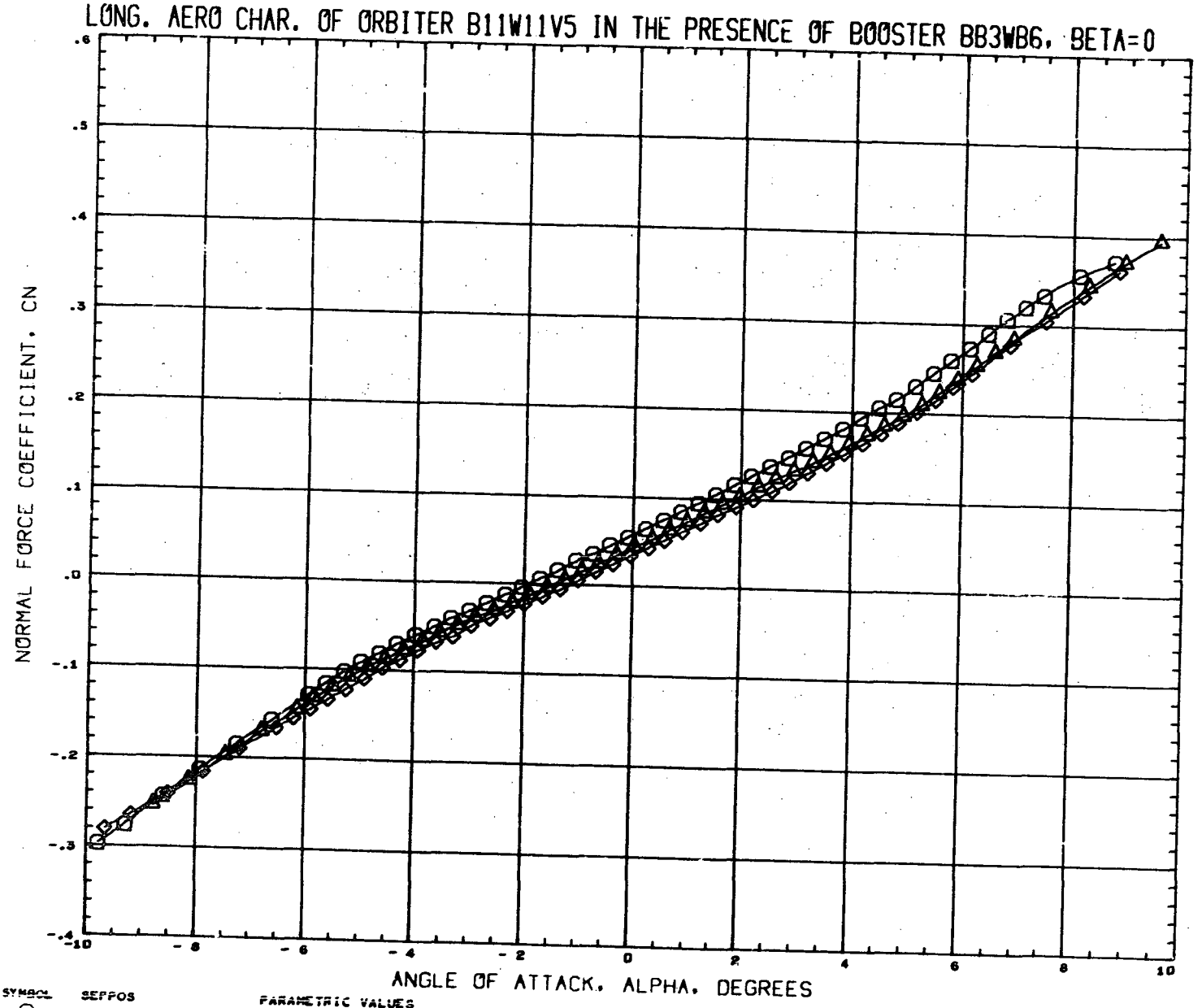
PARAMETRIC VALUES

BETA	-	0.036	MACH		0.890
ALPB		0.223	SETB	-	0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000



SYMBOL	SEFPOS
△	0.004
○	0.005
◇	0.006

PARAMETRIC VALUES

BETA	- 0.036	MACH		0.890
ALFB	0.223	BETB	-	0.010

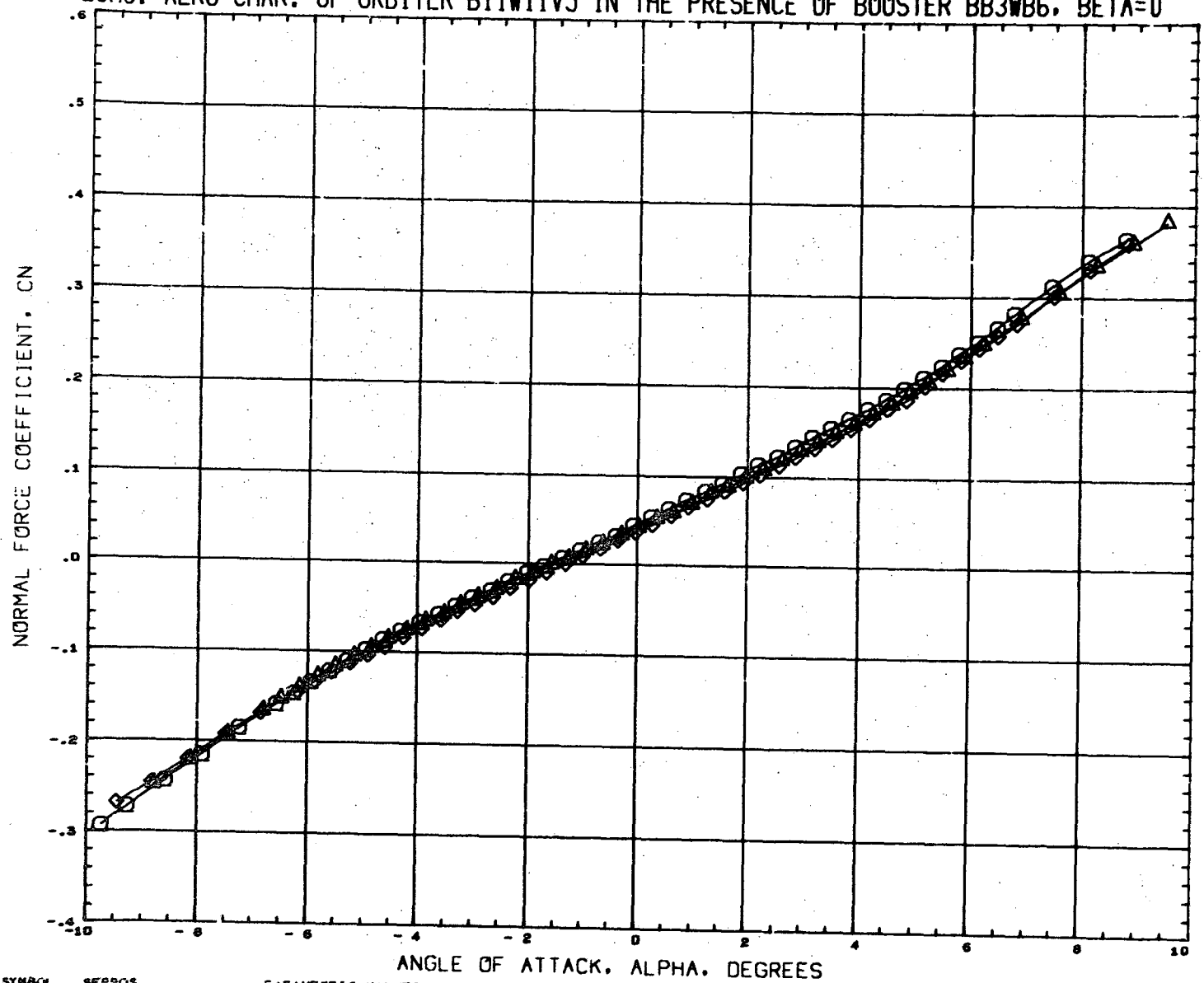
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU006) 21 JUN 71 PAGE 36

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

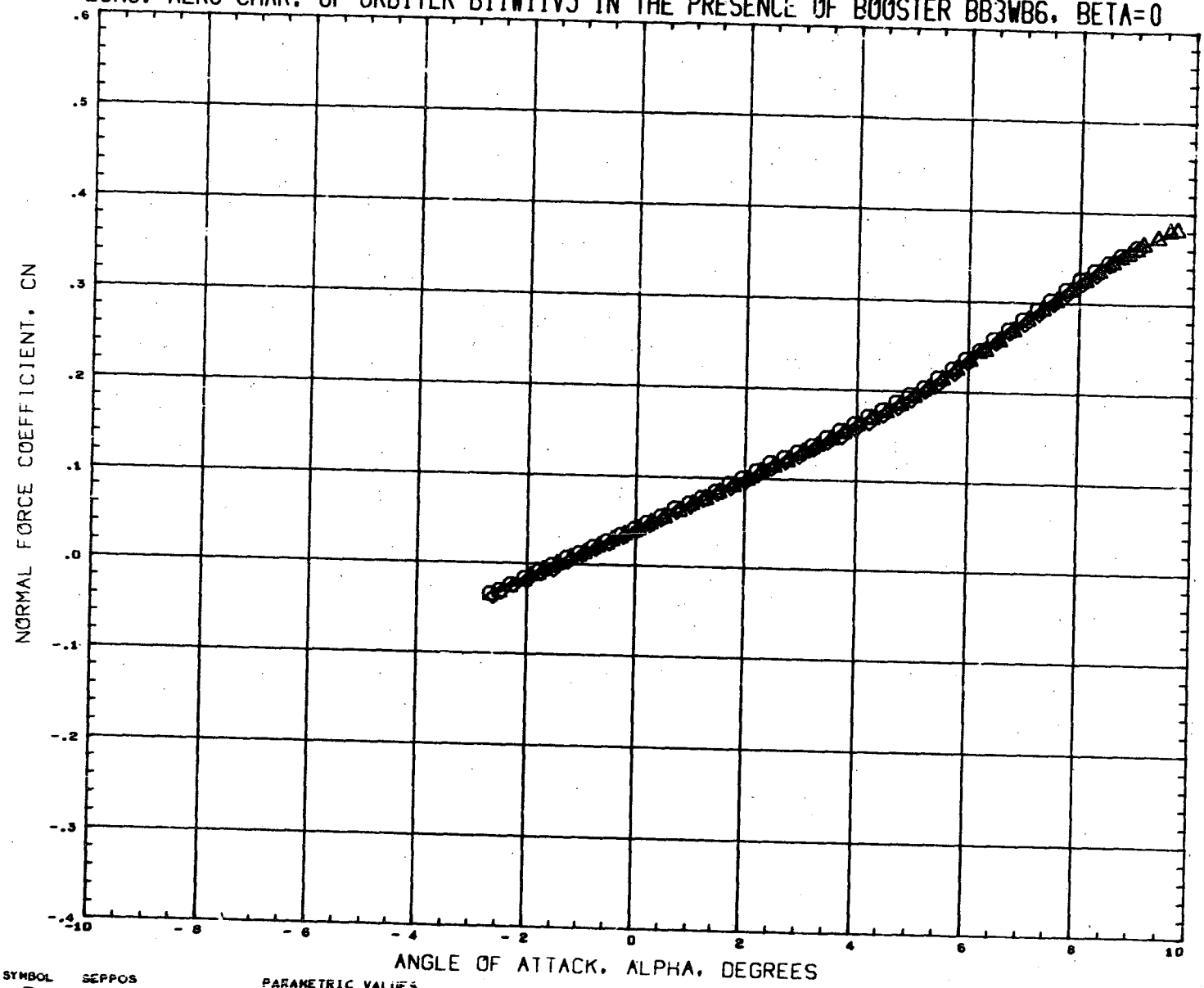
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

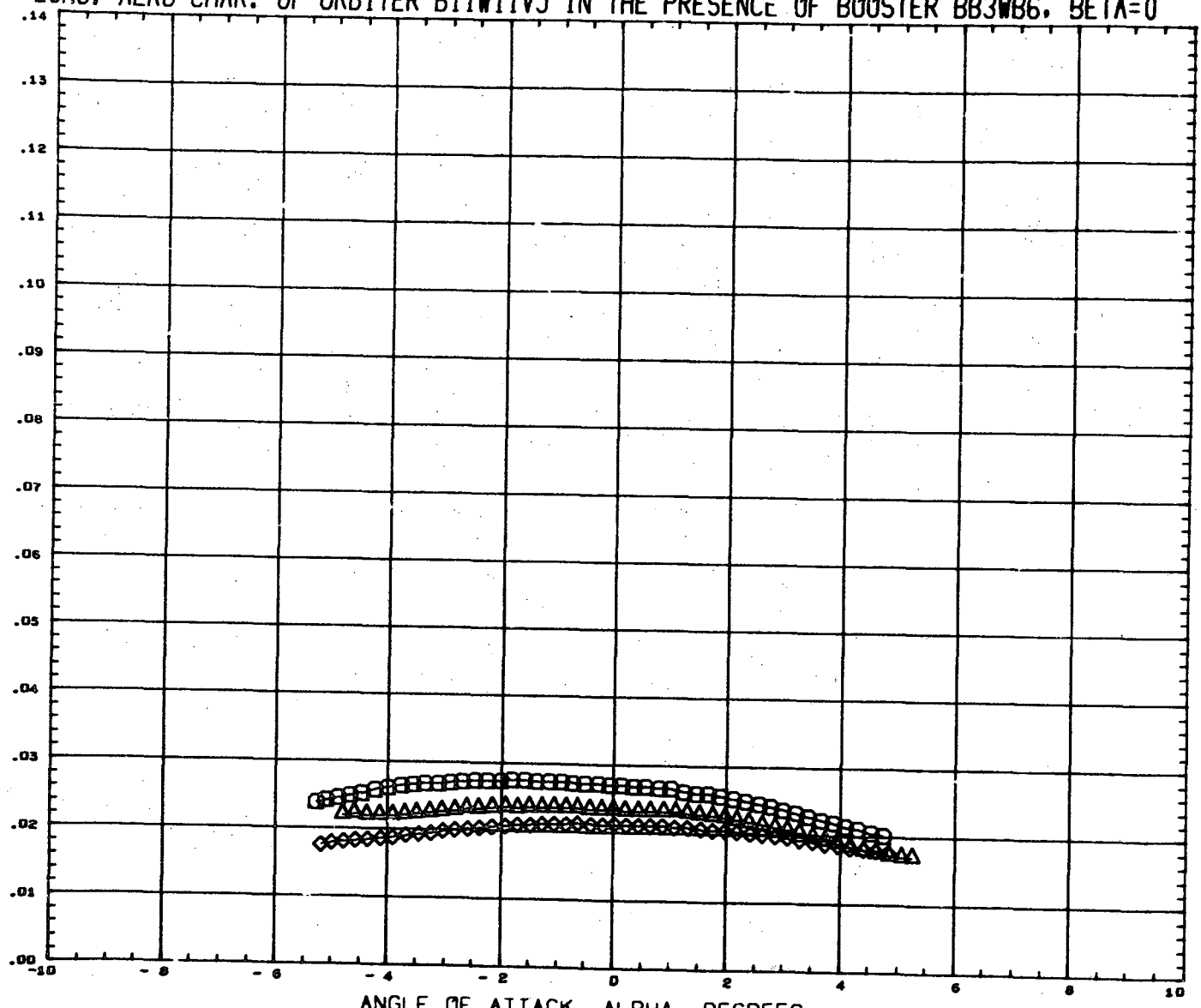
		BETA	- 0.036	MACH	0.890
		ALPB	0.223	BETB	- 0.010

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



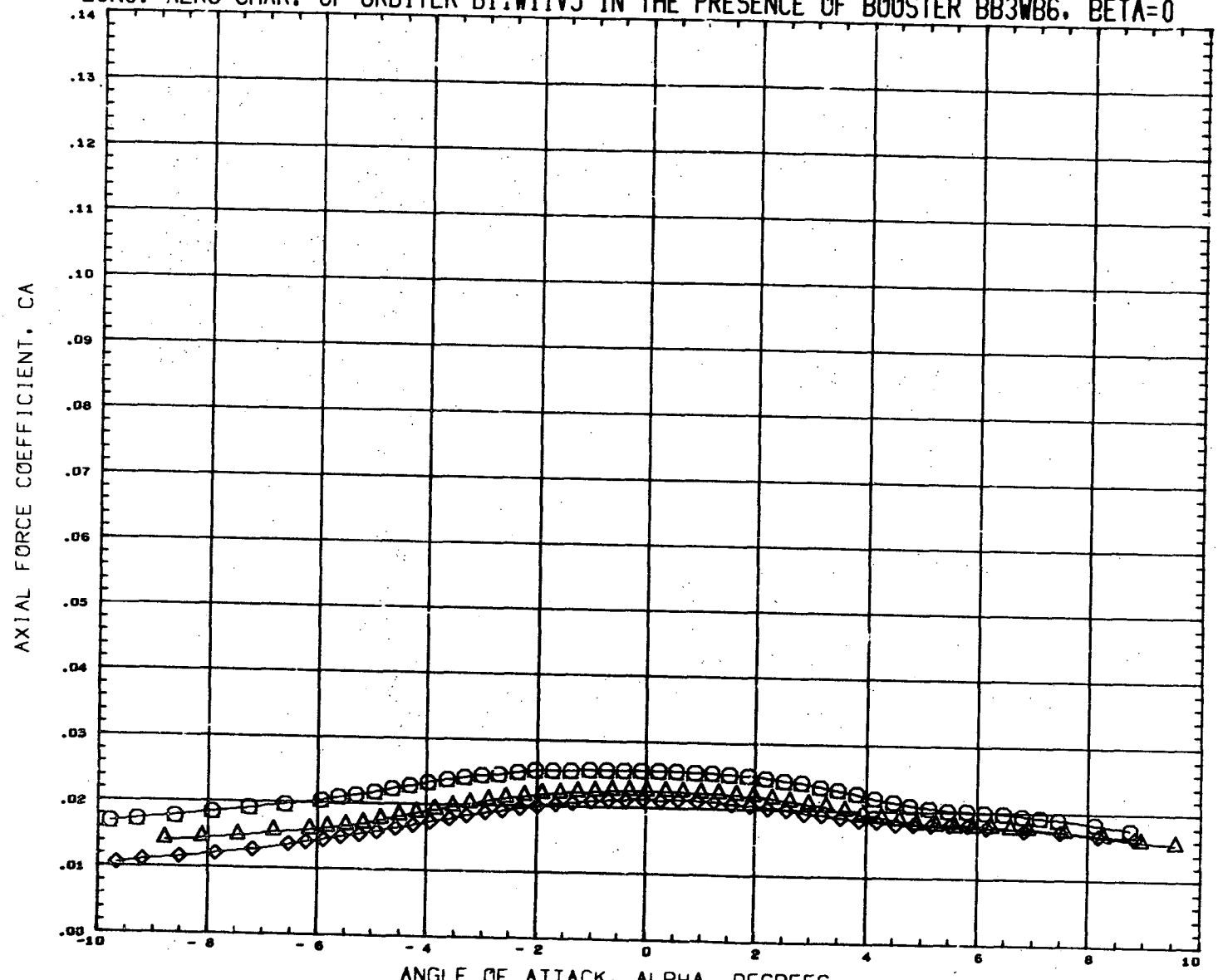
SYMBOL	DELTA	PARAMETRIC VALUES				
○	0.001	BETA	- 0.036	MACH	0.890	
△	0.002	ALFB	0.223	BETB	- 0.010	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



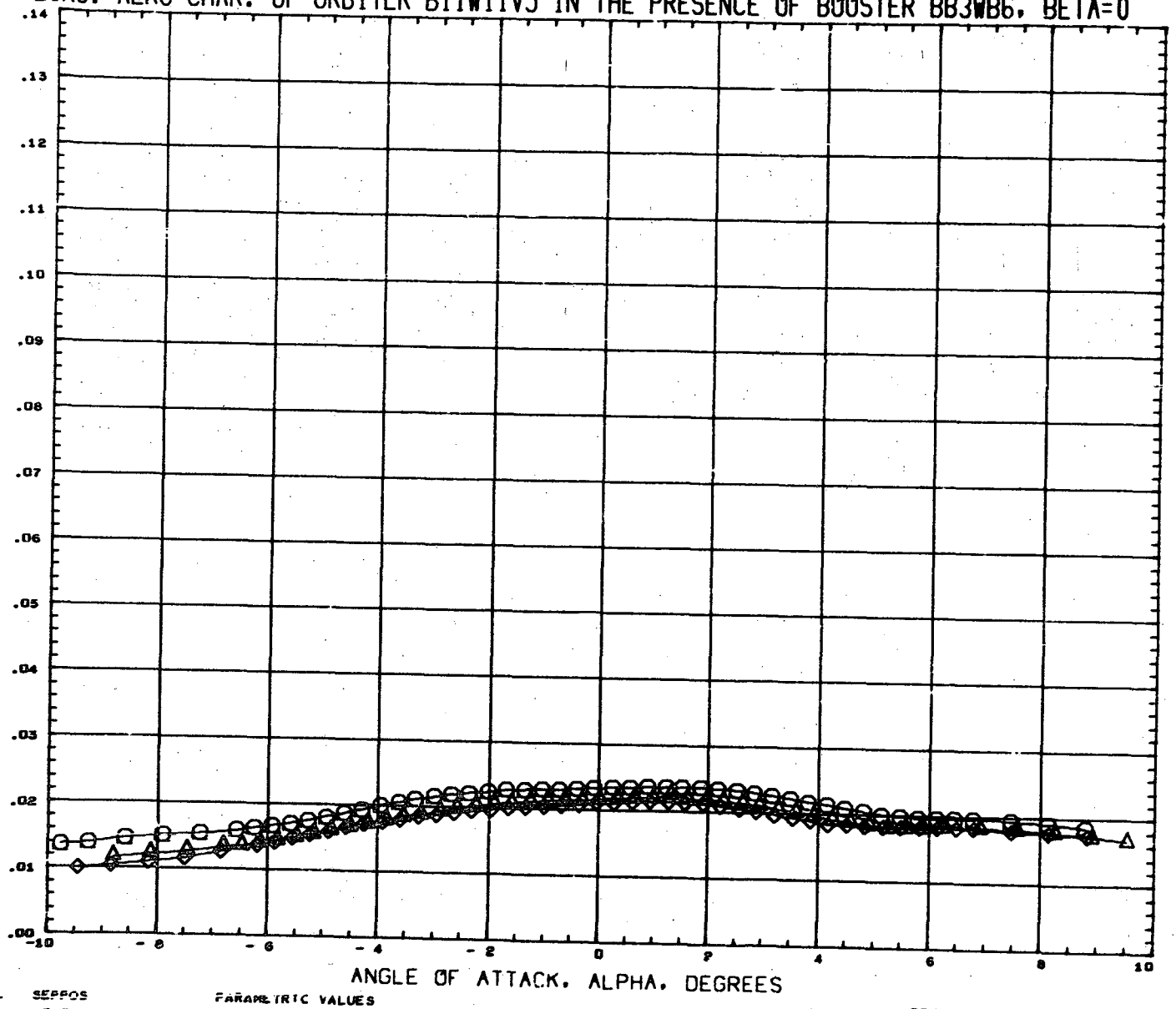
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.004	BETA	- 0.036	MACH	0.890	
△	0.005	ALPB	0.223	BETB	- 0.010	
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEQPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

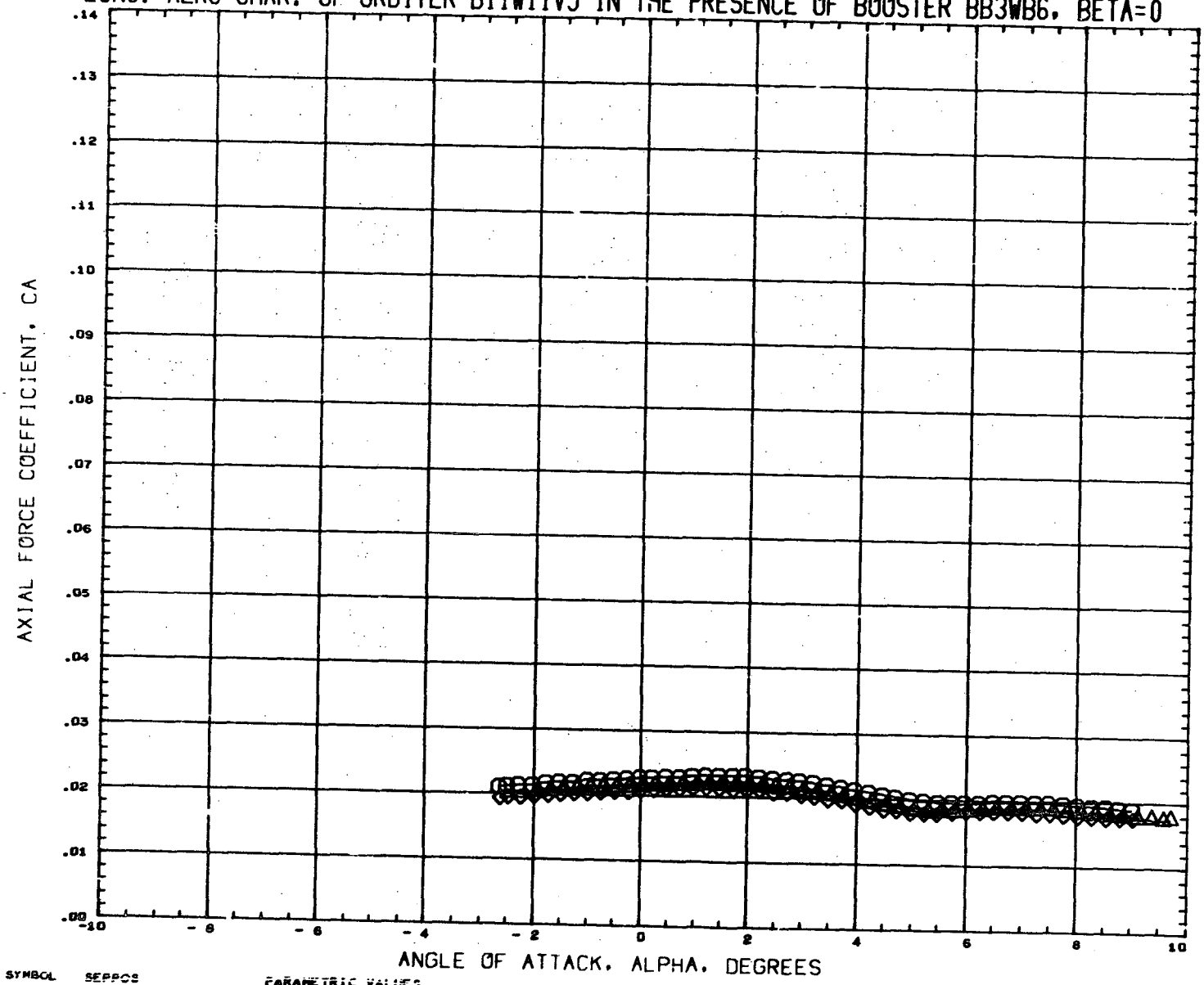
BETA	- 0.036	MACH		0.890
ALPB	0.223	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8620	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



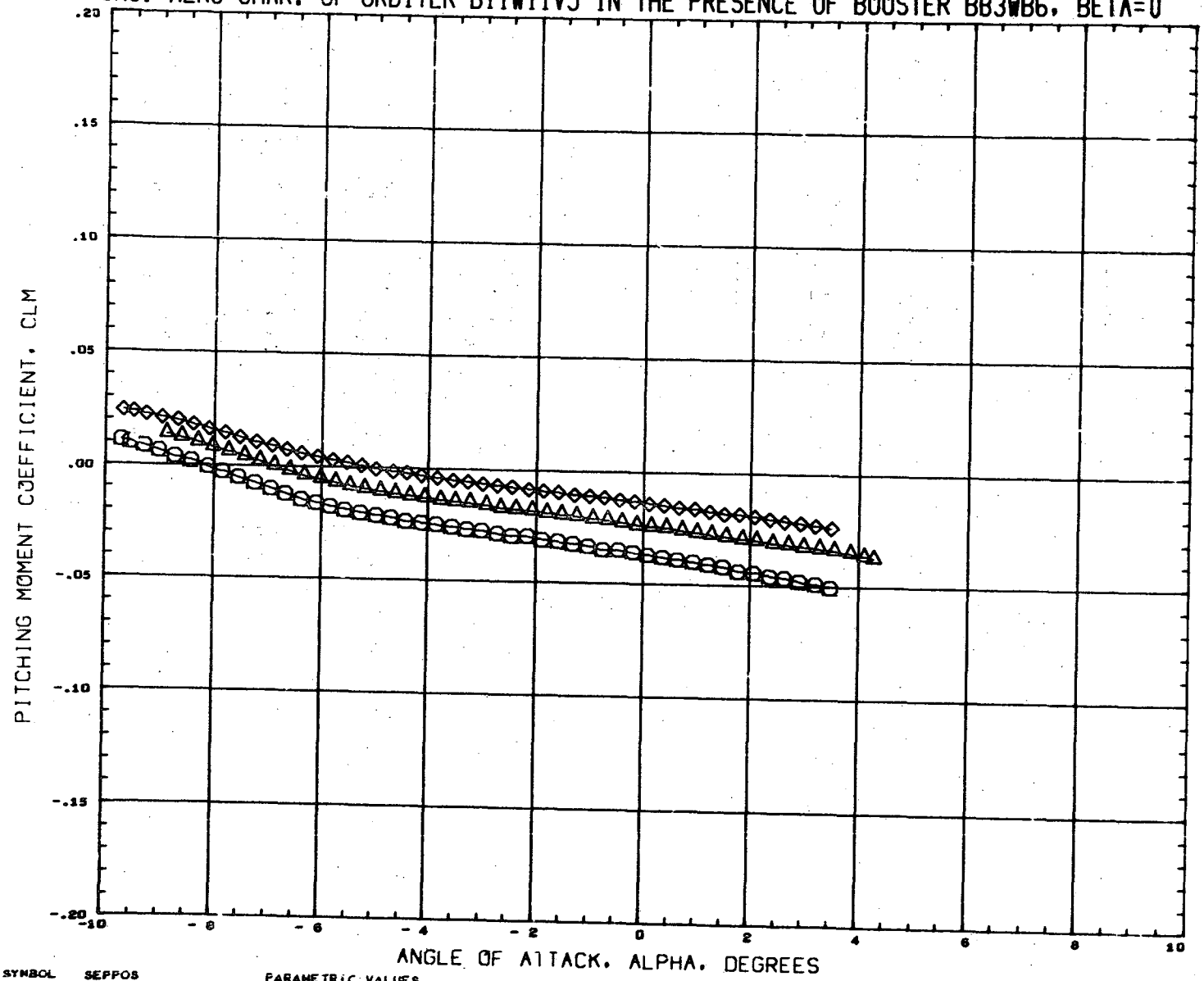
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.010	BETA	- 0.036	MACH	0.890
△	0.011	ALPB	0.223	BETB	- 0.010
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



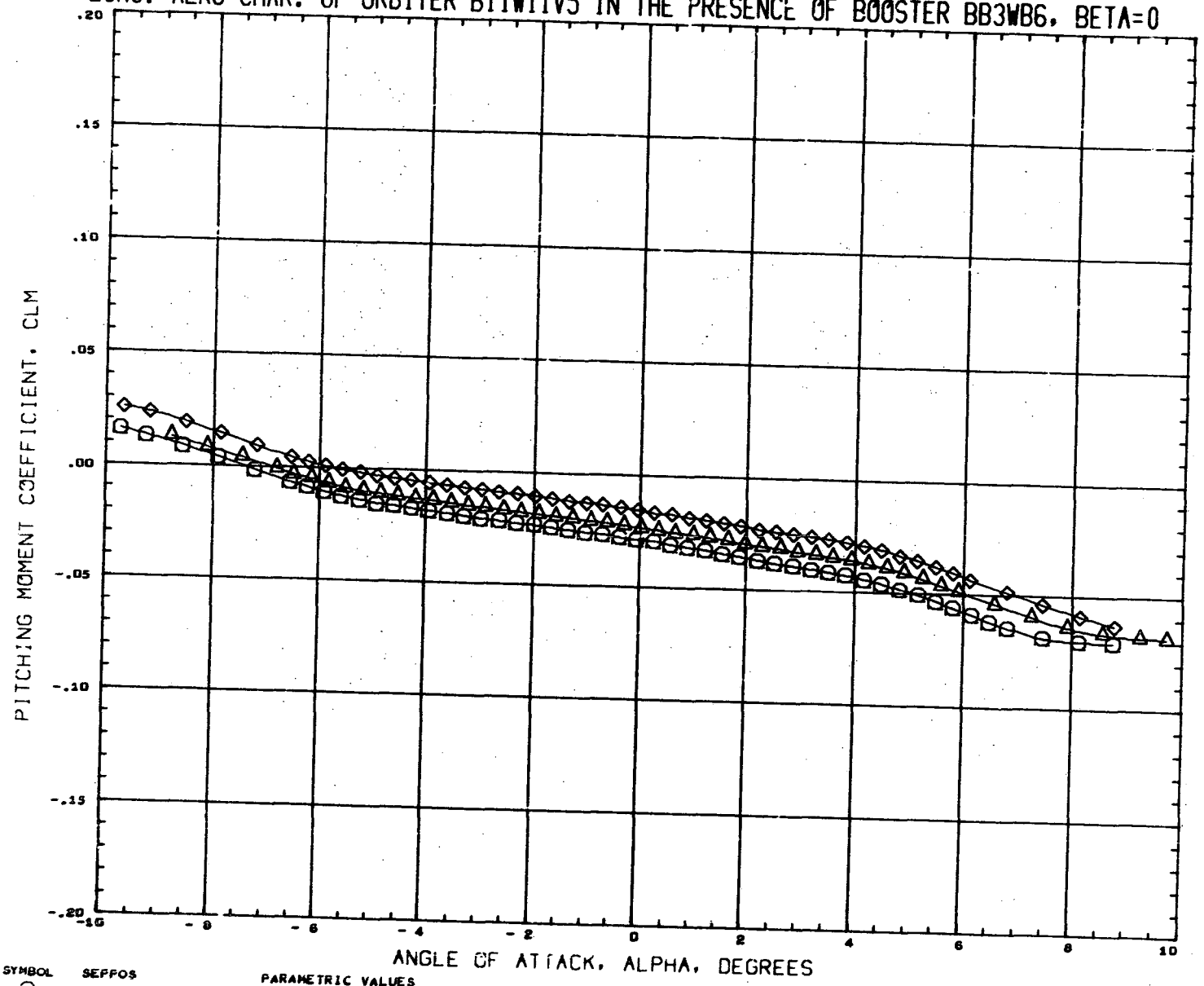
SYMBOL	SEPPOS	PARAMETRIC VALUES			
◇	0.004	BETA	- 0.028	MACH	0.900
△	0.005	ALPB	- 5.224	BETB	- 0.008
○	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFFOS
◇	0.007
△	0.008
○	0.009

PARAMETRIC VALUES

BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

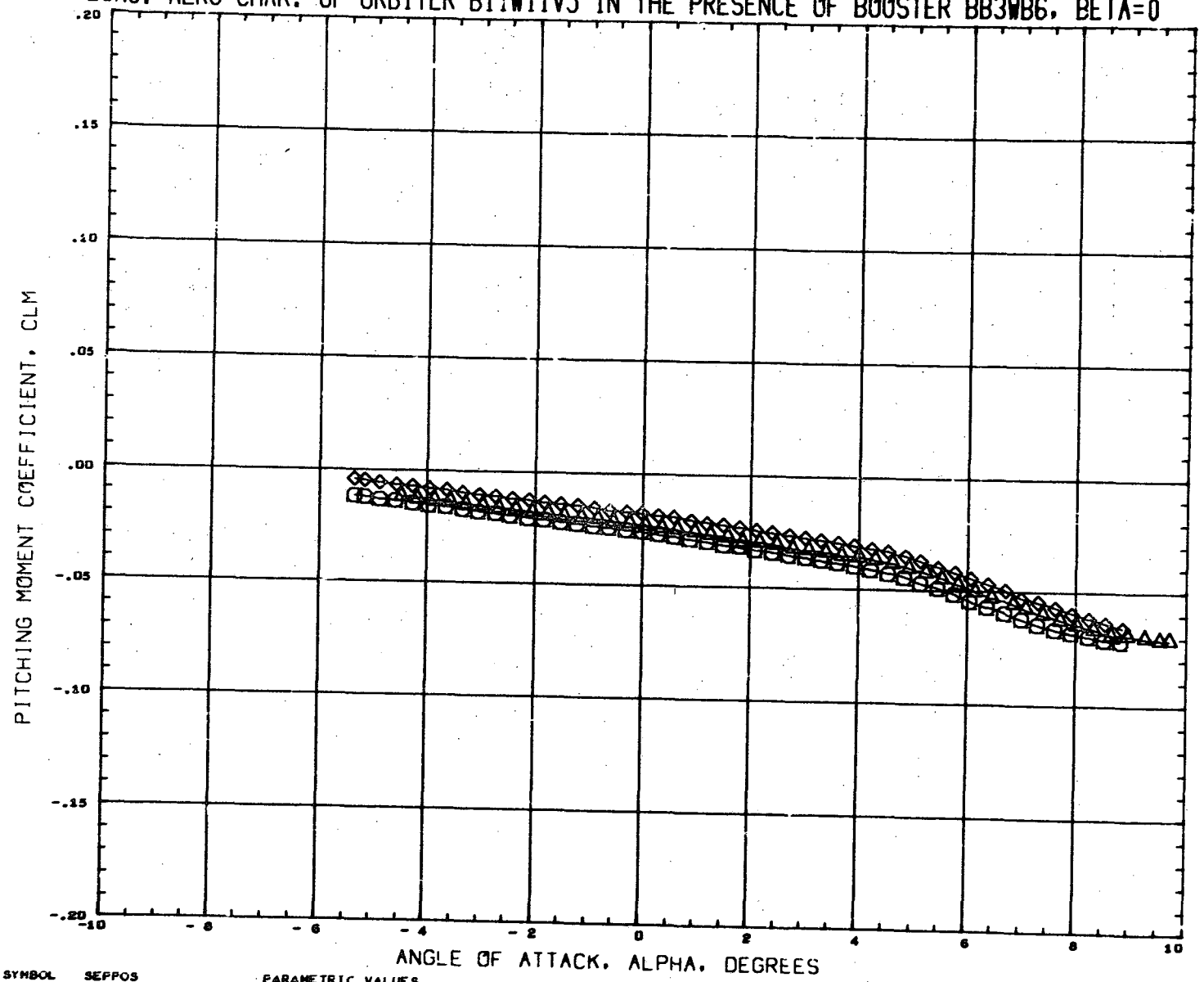
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

MSC S-30 ORBITER B11W11V5 NEAR BB3WBS (RCU014) 21 JUN 71 PAGE 44

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

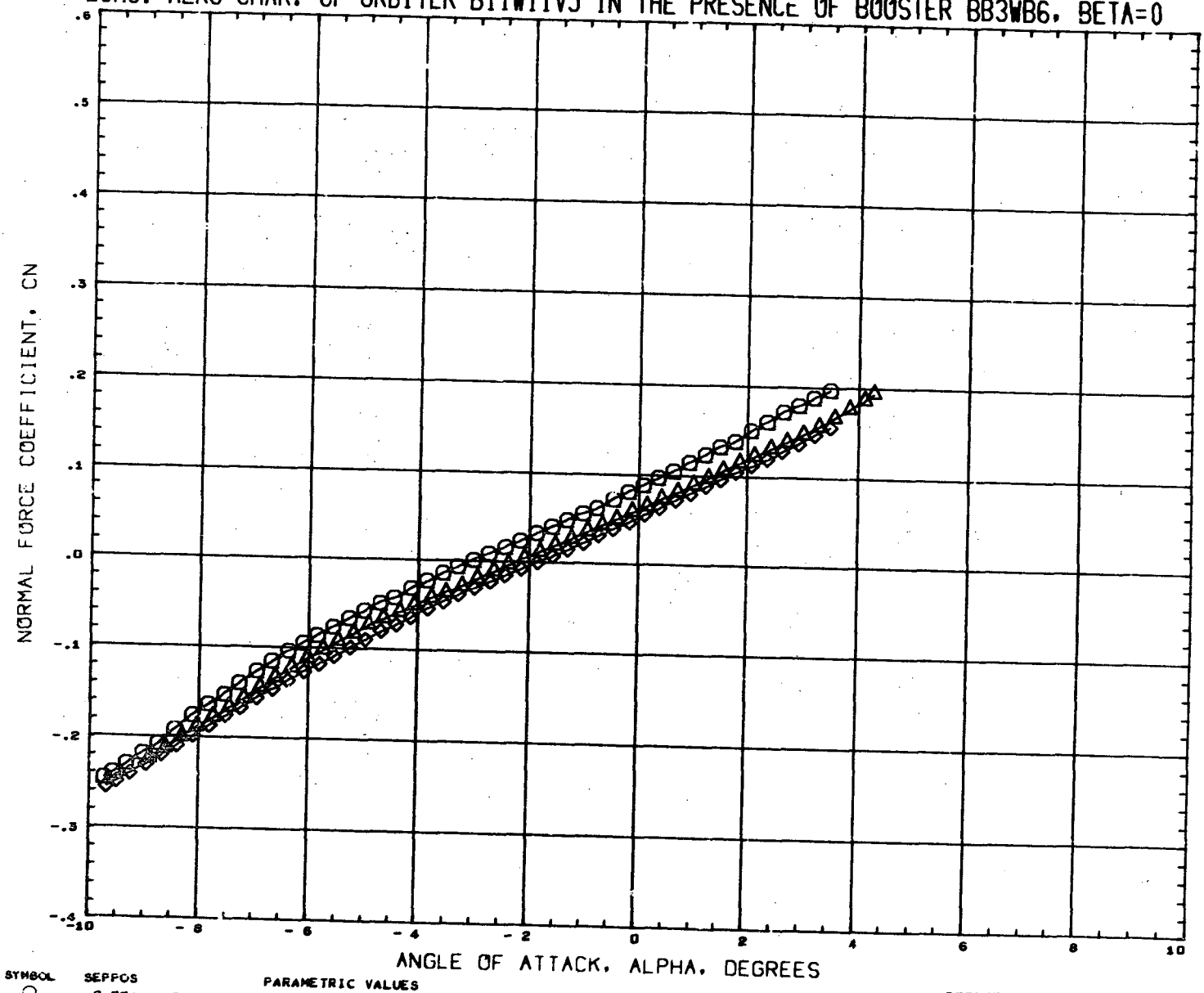
PARAMETRIC VALUES

BETA	-	0.028	MACH		0.900
ALFB	-	5.224	RETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

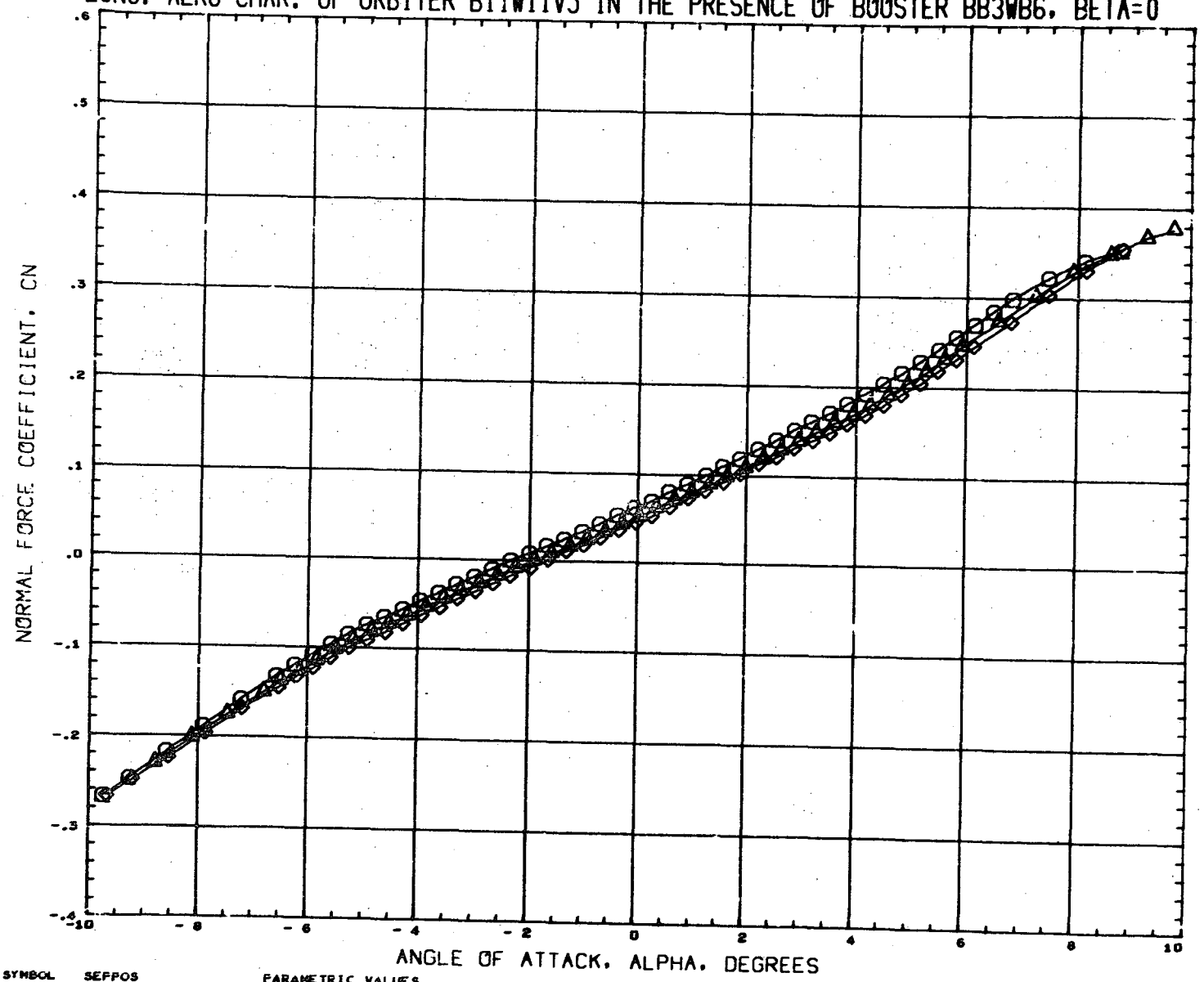
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

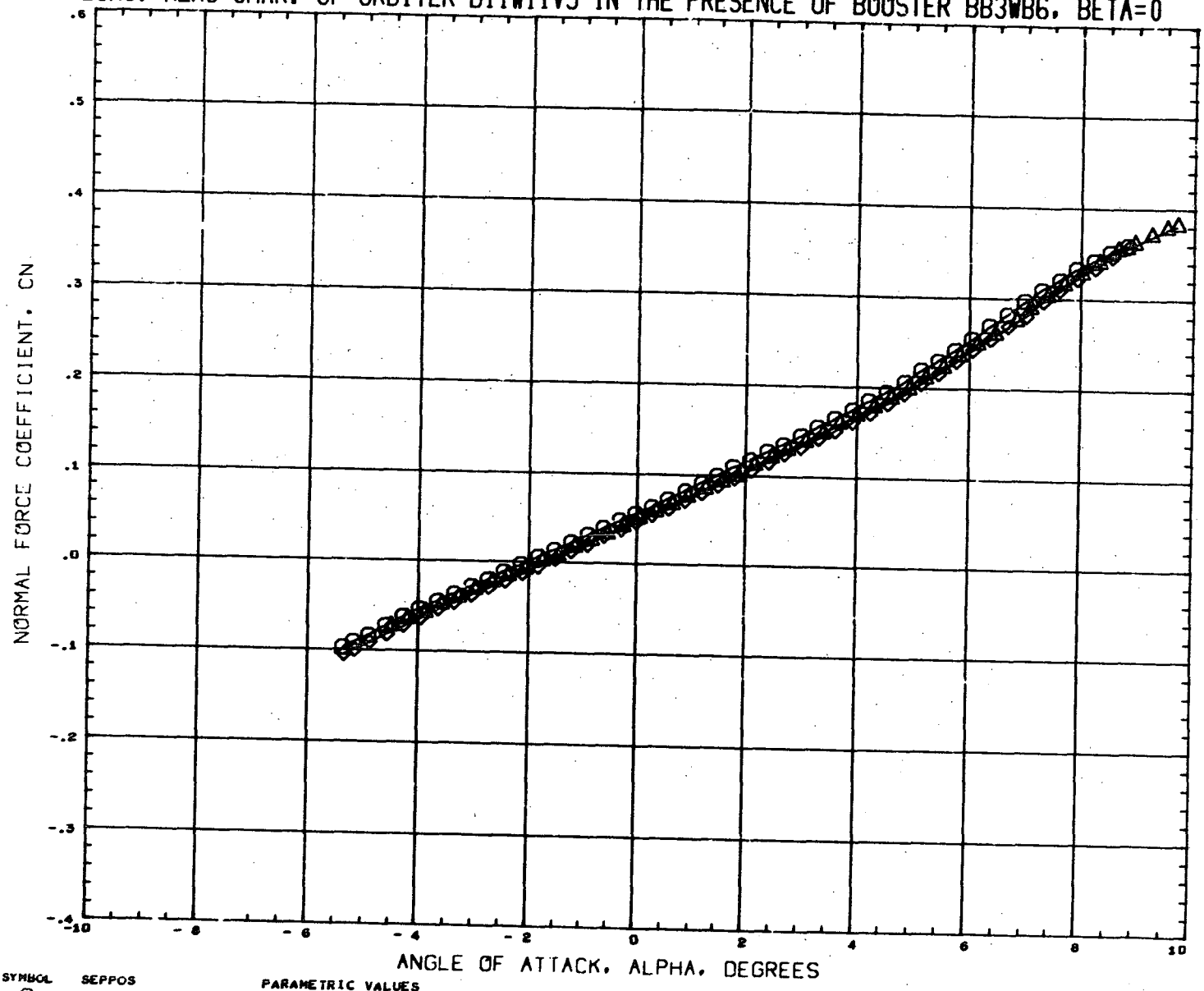
BETA	-	0.028	MACH		0.900
ALFB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

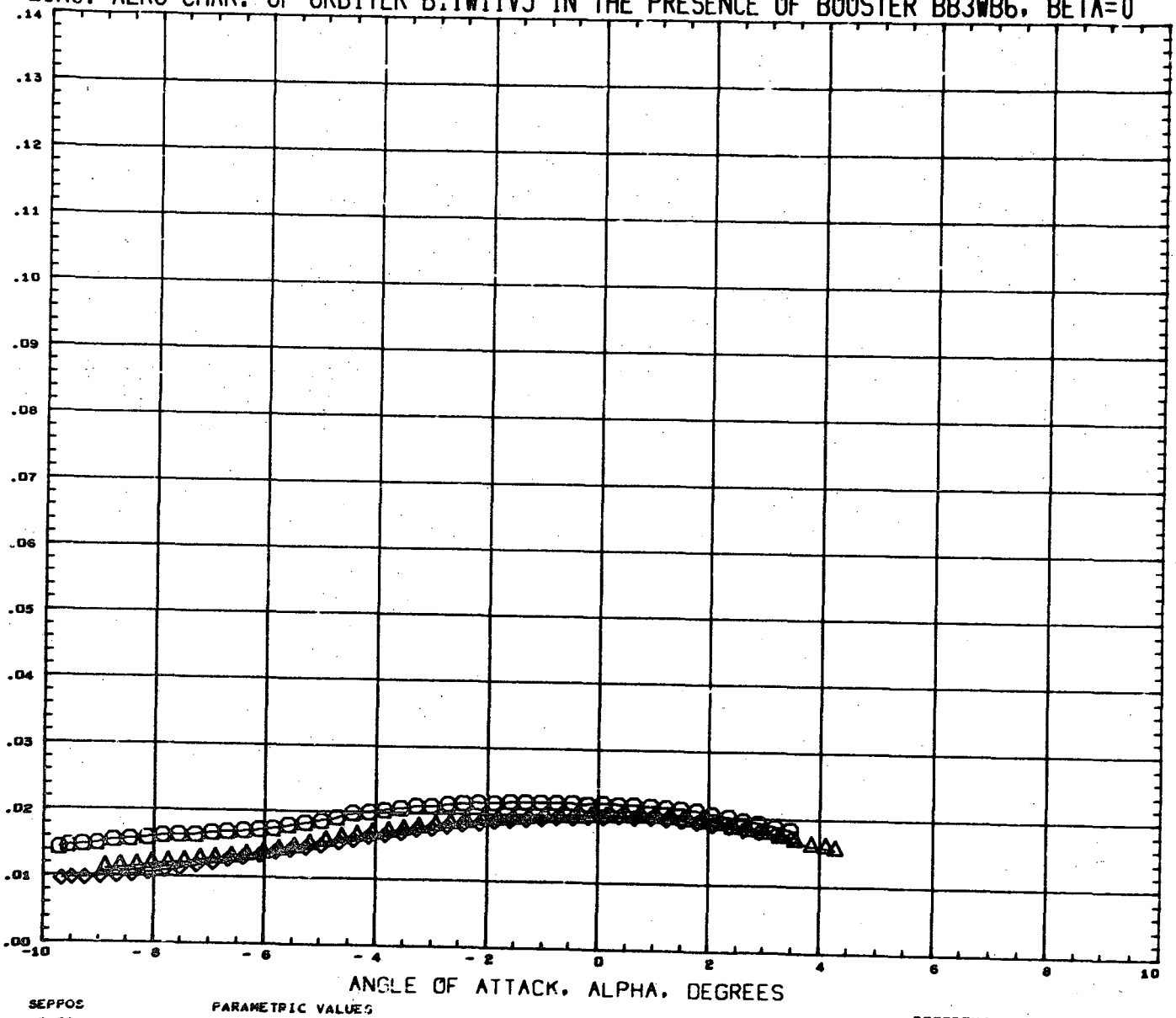
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

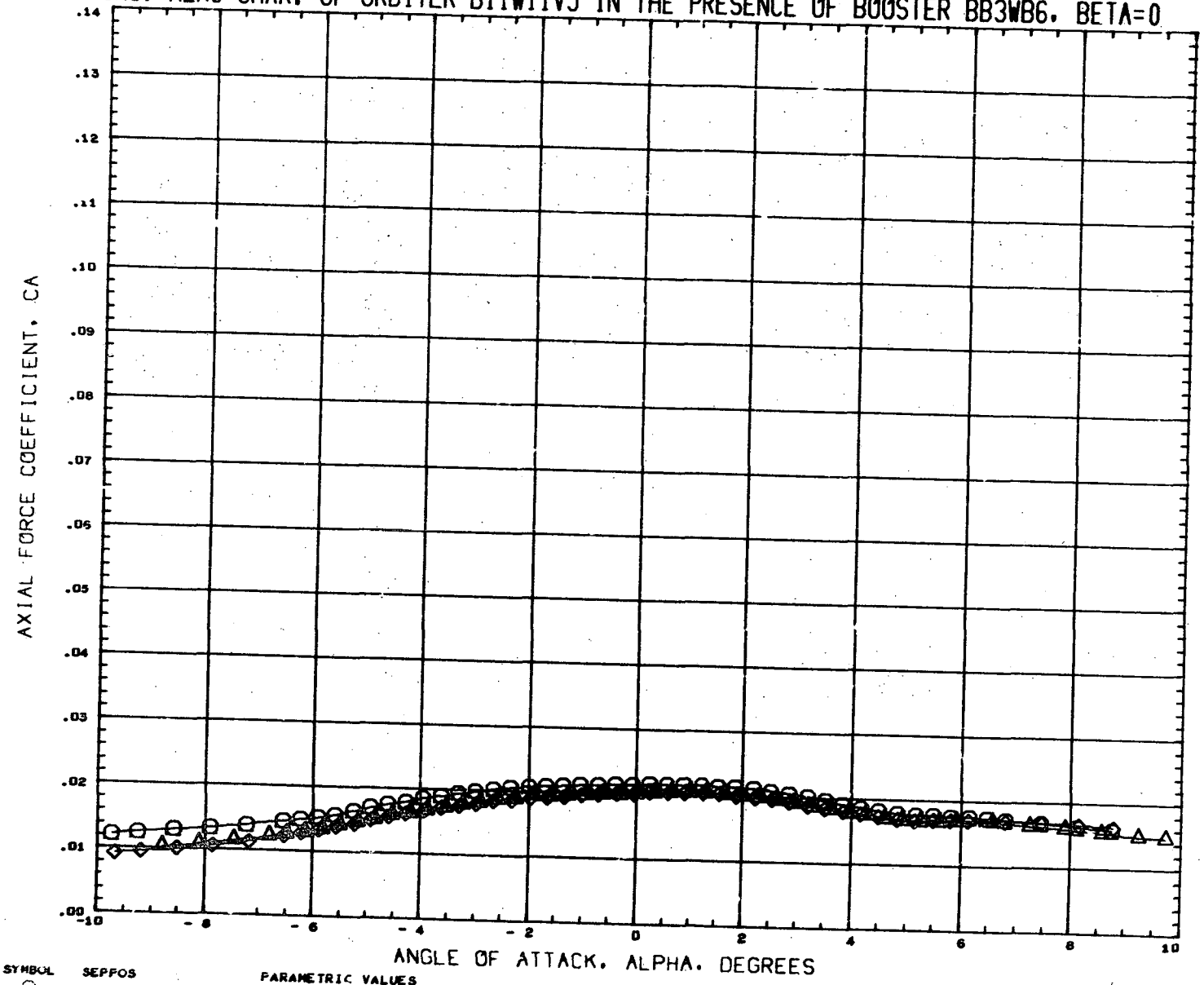
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRF	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0

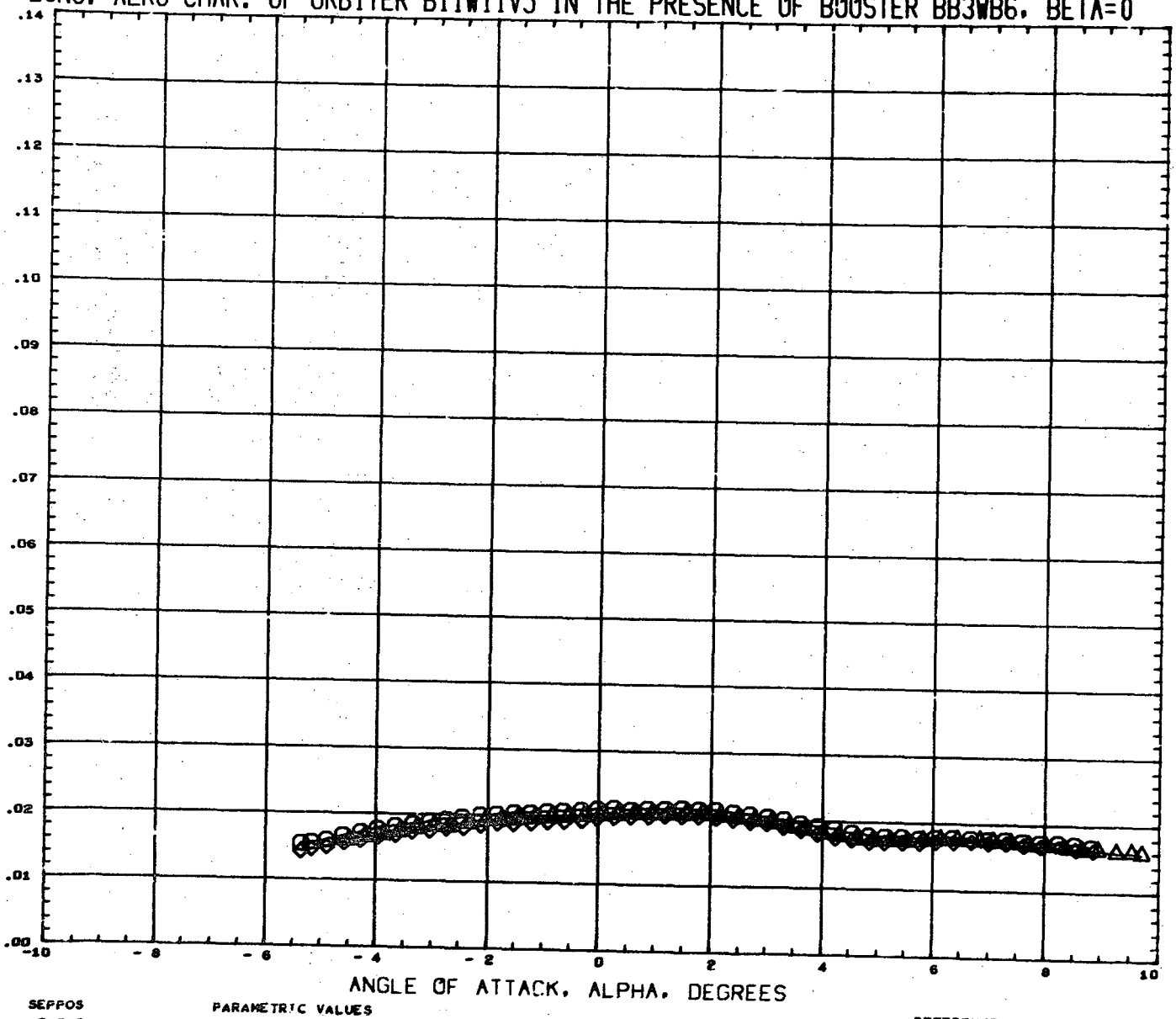


SYMBOL	SEPFOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.028	MACH	0.900	
△	0.008	ALPB	- 5.224	BETB	- 0.008	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	-	0.028	MACH		0.900
ALPB	-	5.224	RETB	-	0.008

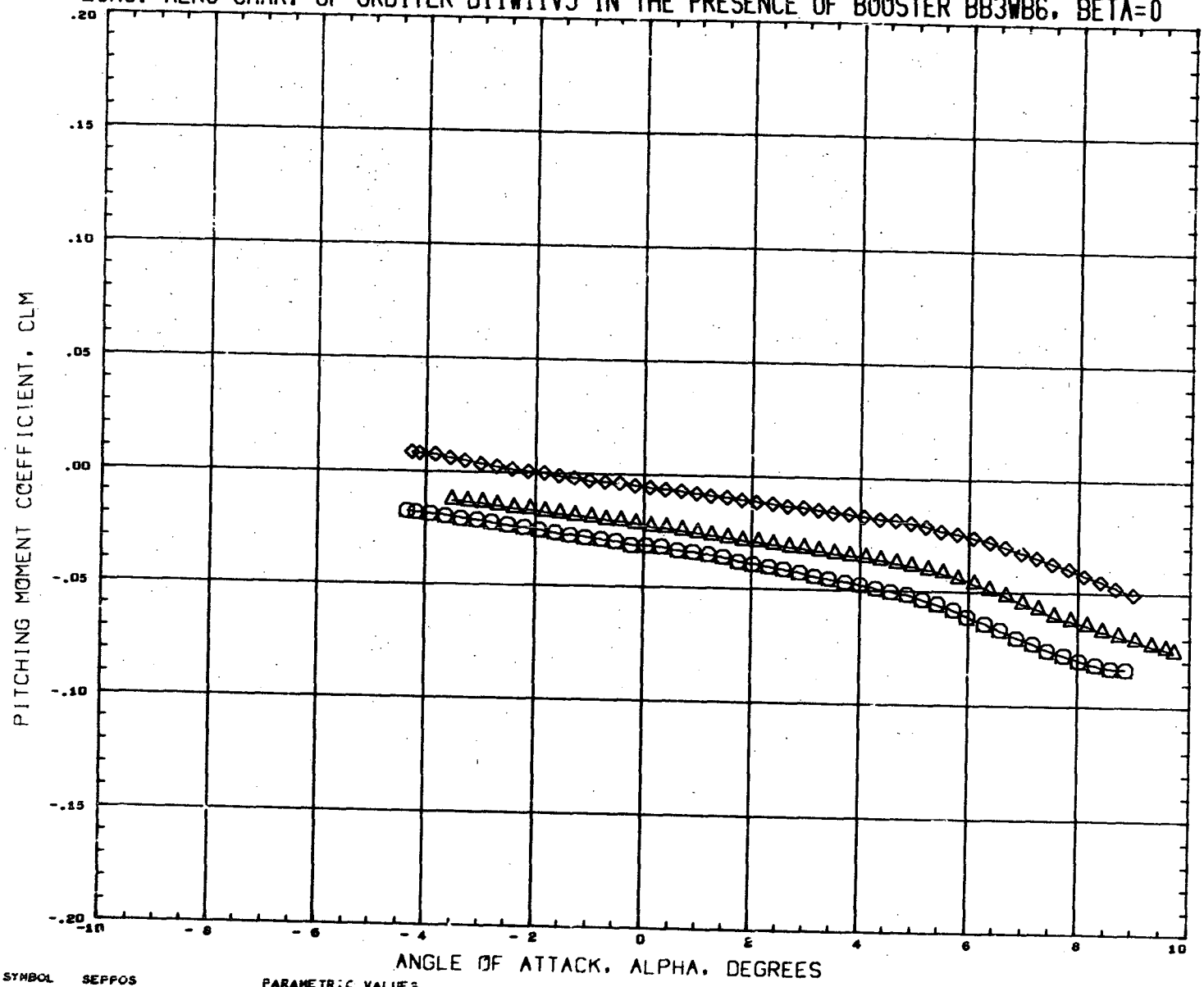
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU014) 21 JUN 71 PAGE 51

LØNG. AERØ CHAR. ØF ØRBITER B11W11V5 IN THE PRESENCE ØF BØØSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
△	0.004
◇	0.005
	0.006

PARAMETRIC VALUES

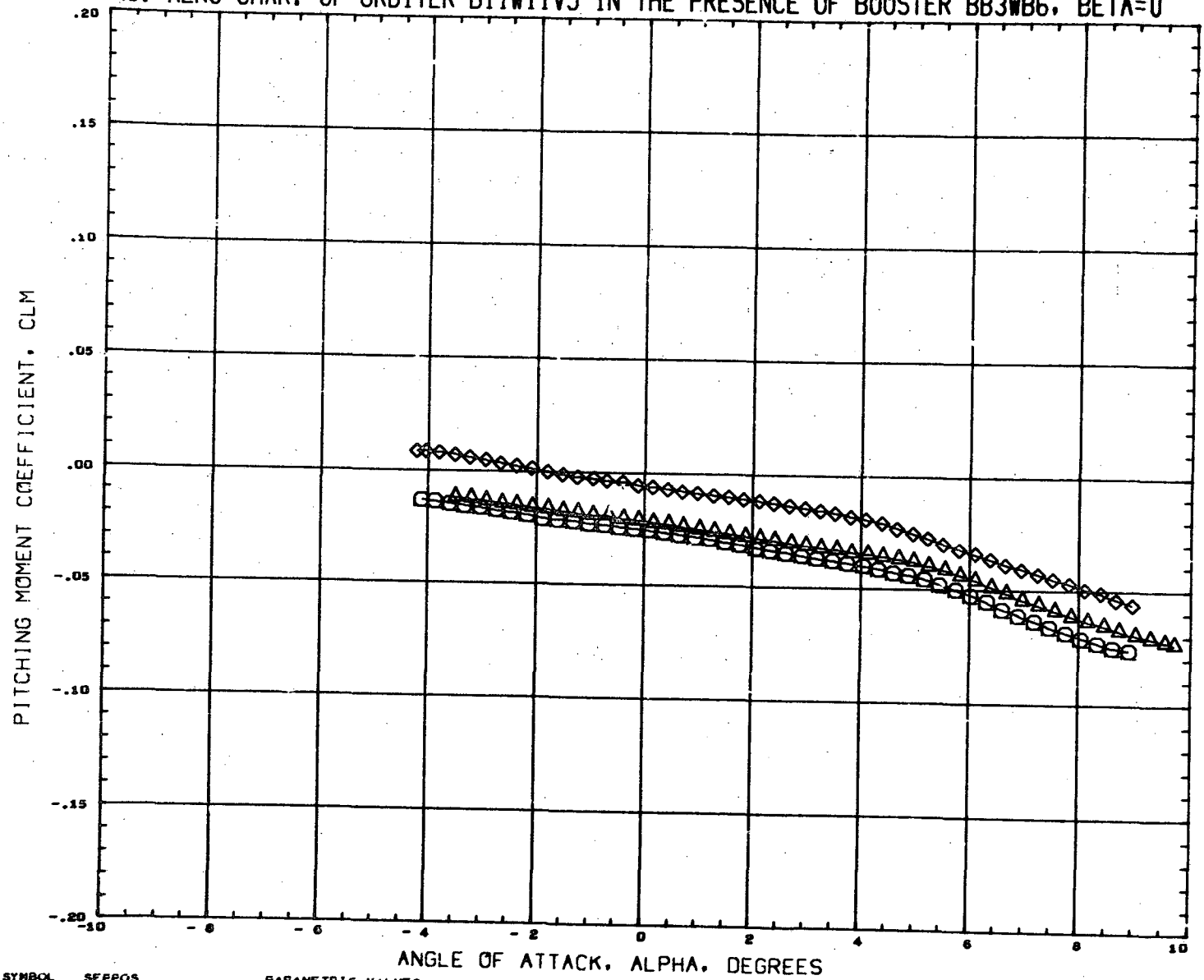
BETA	-	0.024	MACH		0.900
ALPB		3.908	DETB	-	0.007

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3886	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFPOS
○	0.007
△	0.006
◇	0.009

PARAMETRIC VALUES

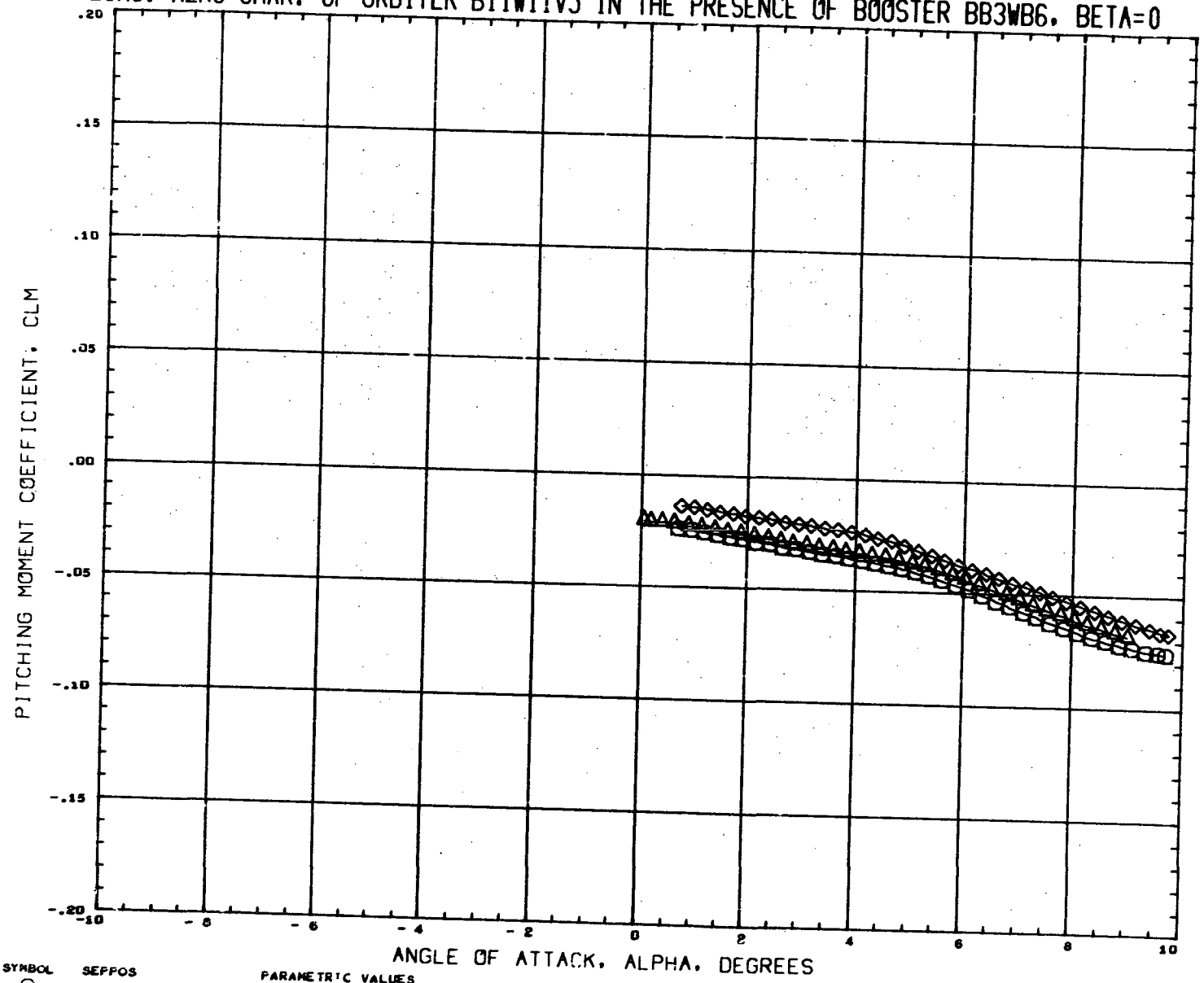
BETA	-	0.024	MACH		0.900
ALFB		3.908	BETB	-	0.007

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



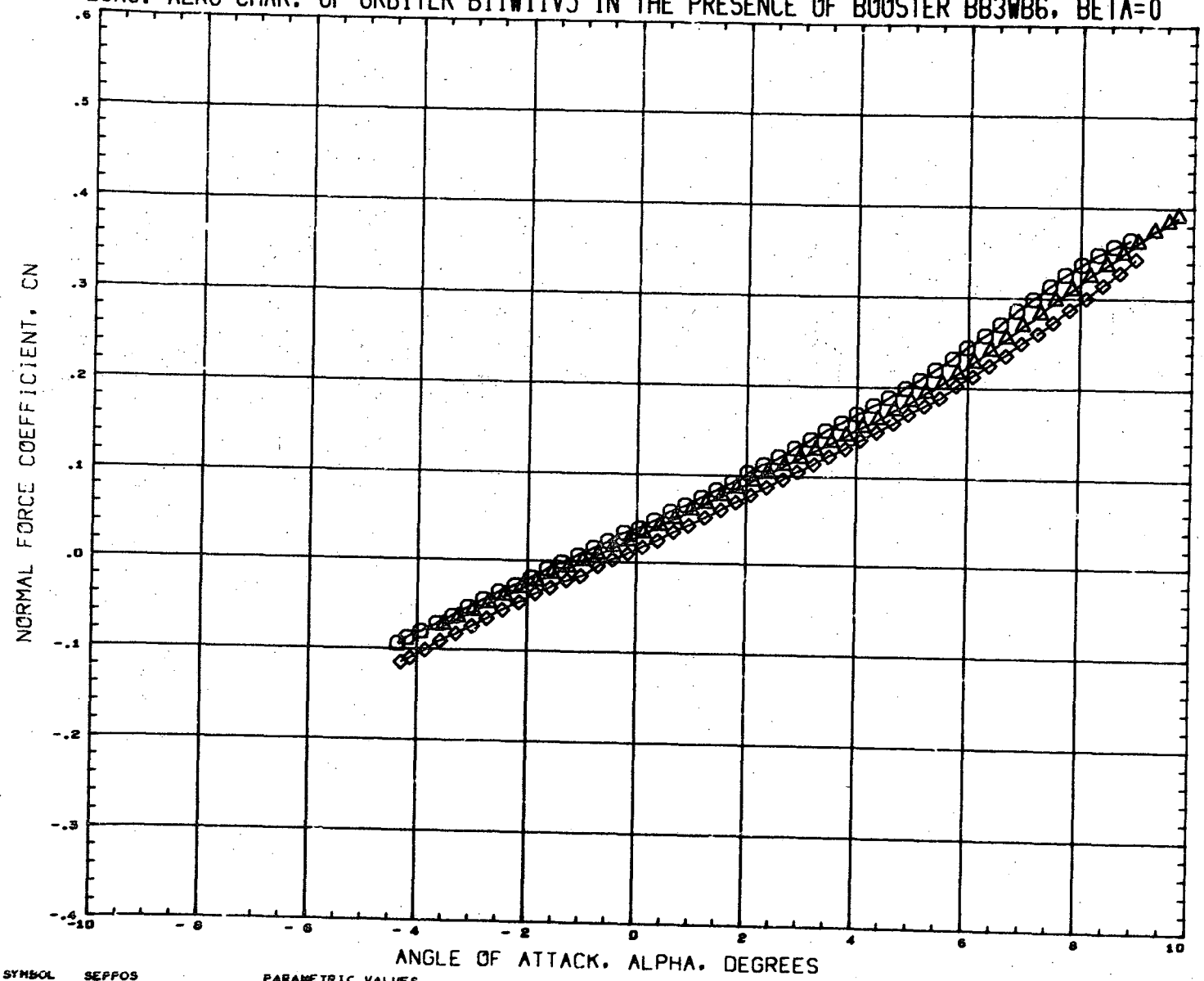
SYMBOL	SEFFOS		PARAMETRIC VALUES			
○	0.010	BETA	- 0.024	MACH	0.900	
△	0.011	ALPB	3.908	BETB	- 0.007	
◇	0.012					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0086	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

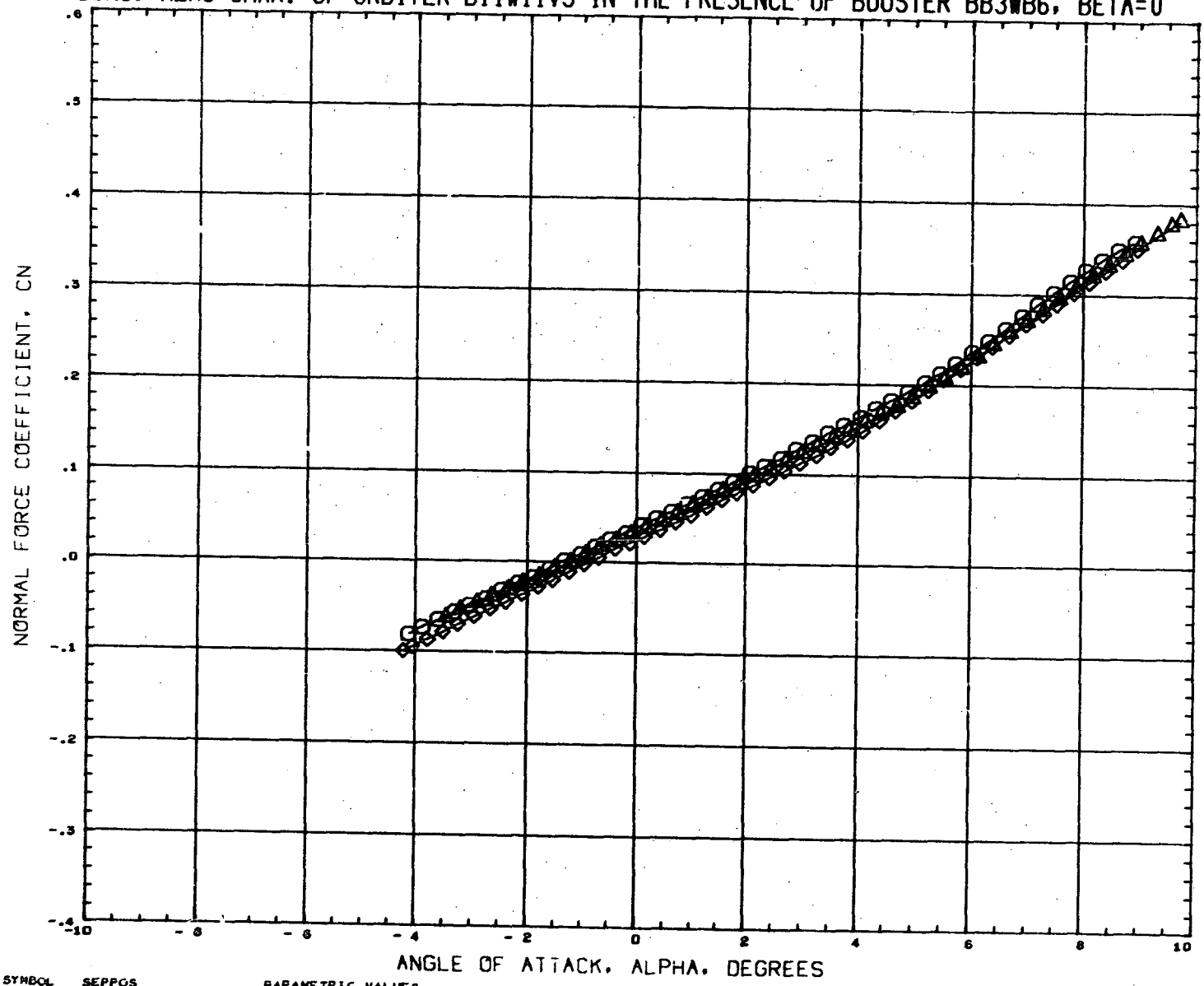
BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8620	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



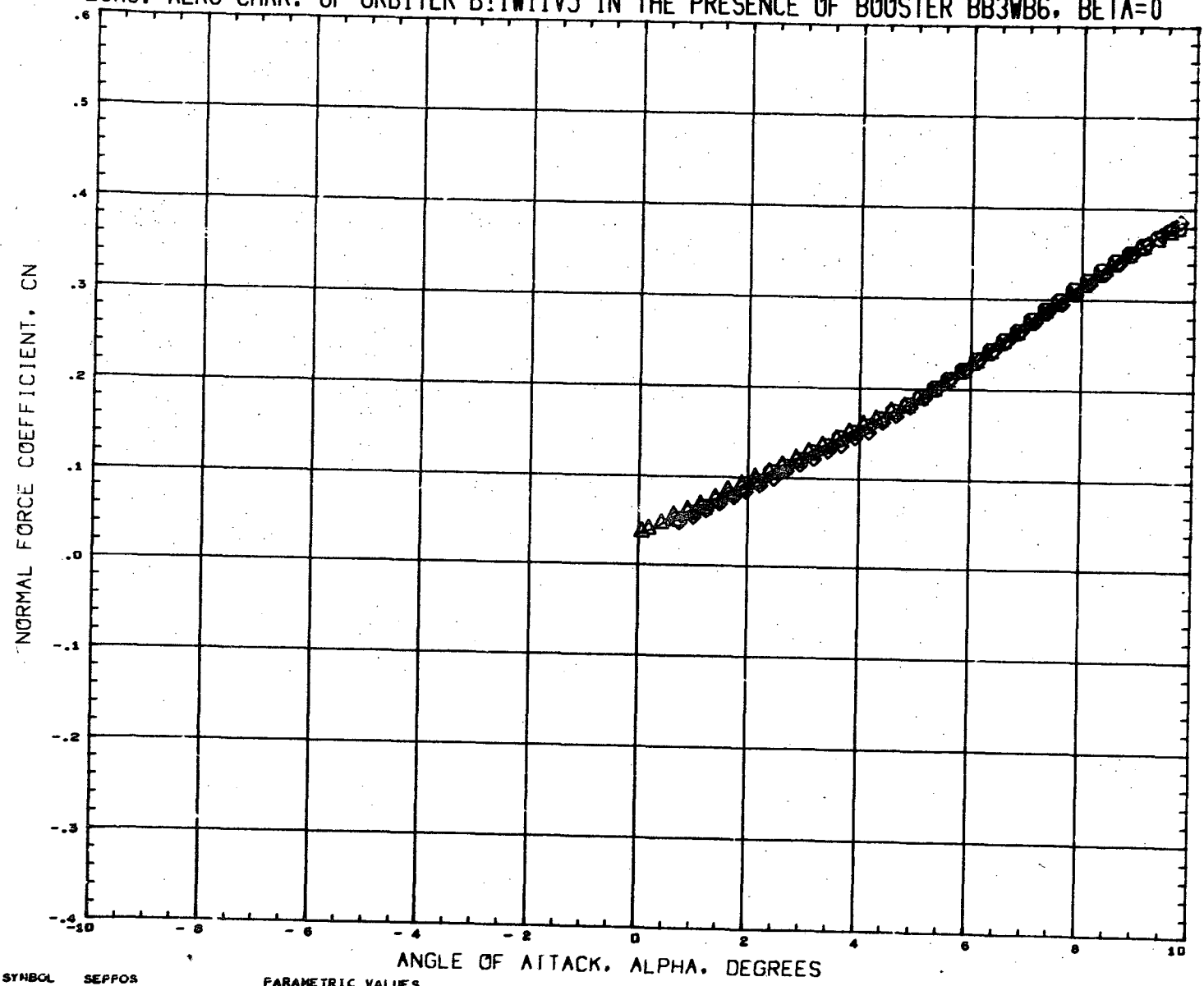
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.024	MACH	0.900	
△	0.008	ALPB	3.908	BETB	- 0.007	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
△	0.010
◇	0.011
	0.012

PARAMETRIC VALUES

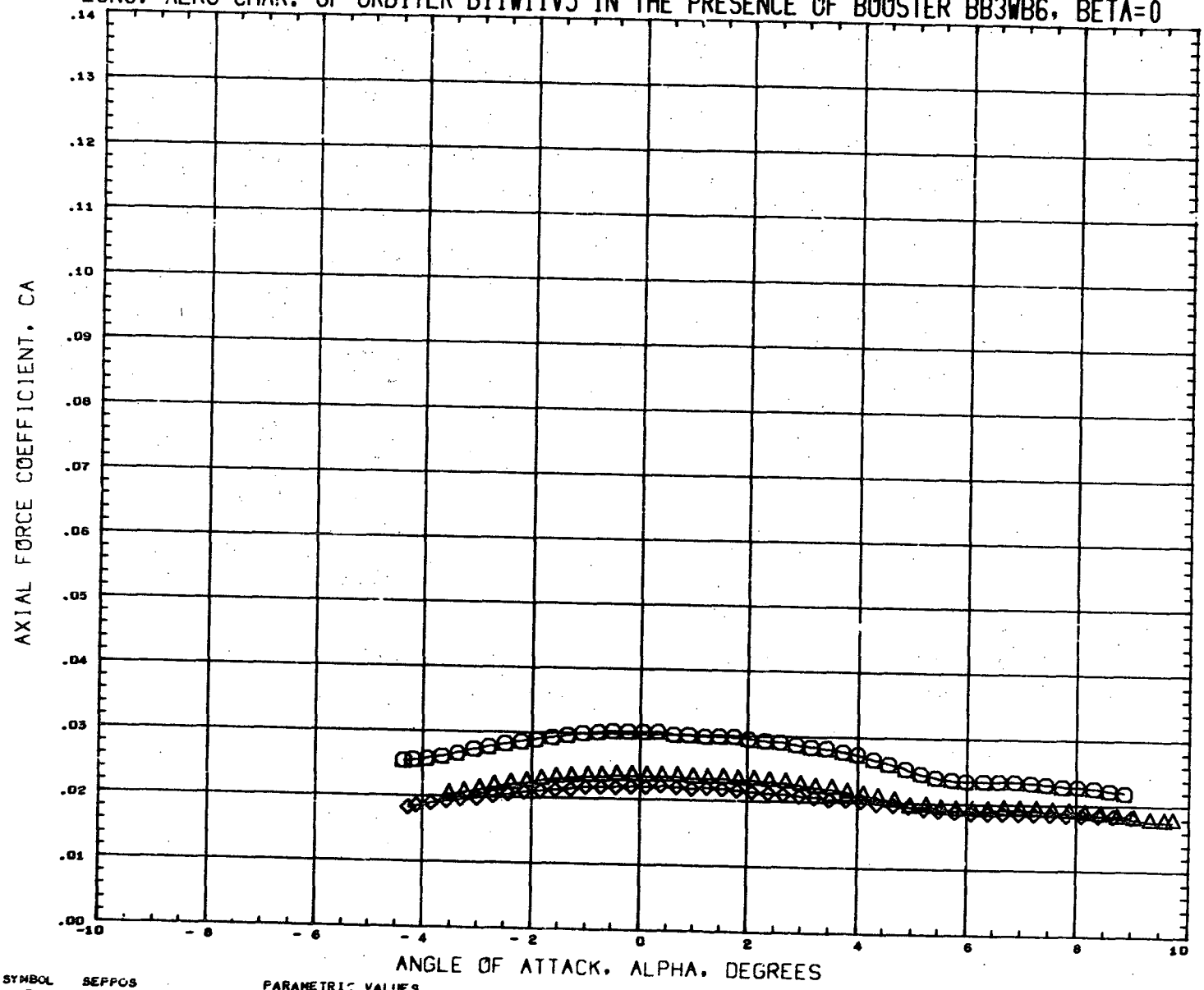
BETA	-	0.024	MACH		0.900
ALFB		3.908	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.3750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0

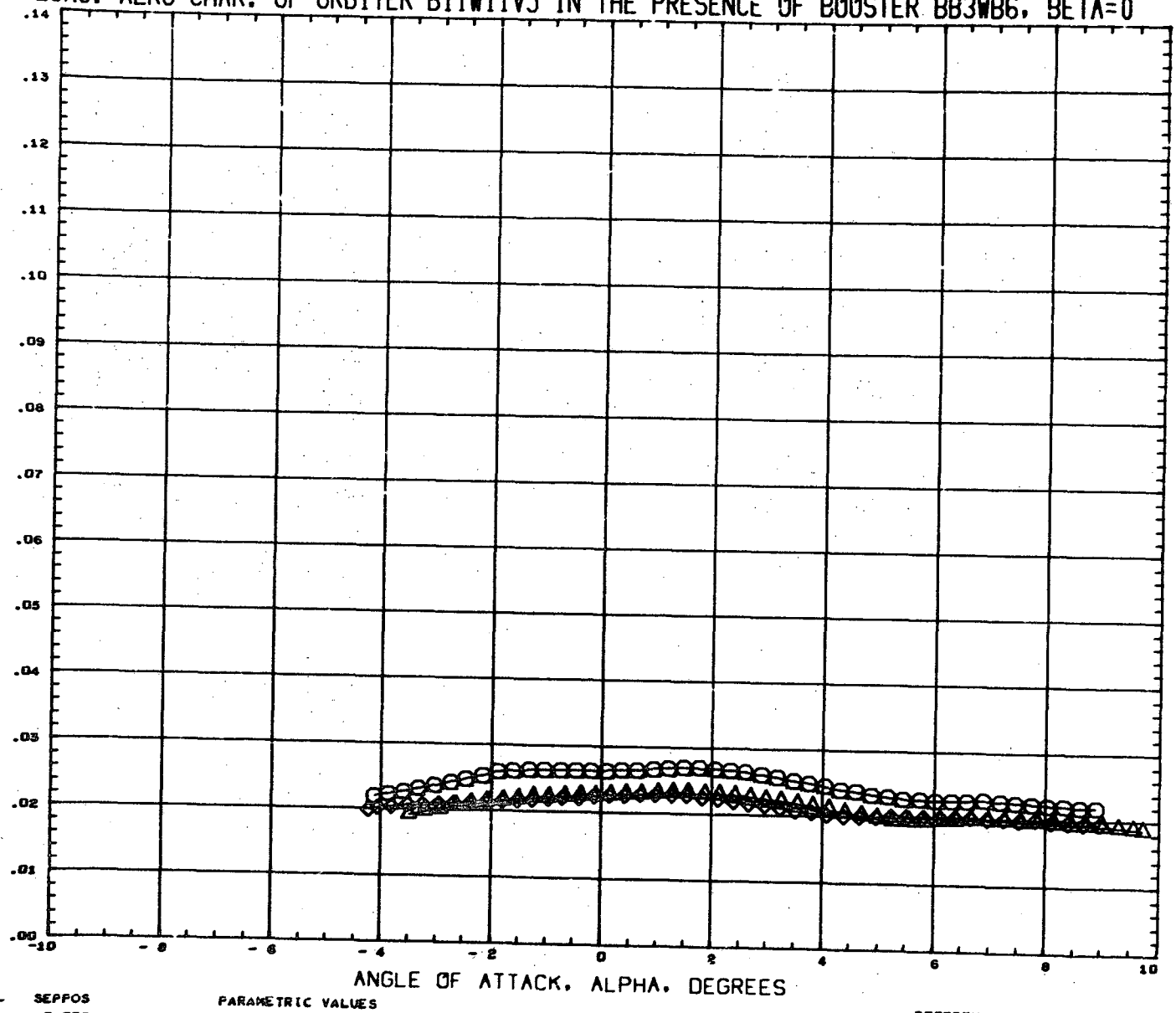


SYMBOL	SEFPOS		PARAMETRIC VALUES		
☒	0.004	BETA	- 0.024	MACH	0.900
△	0.005	ALPB	3.908	BETB	- 0.007
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

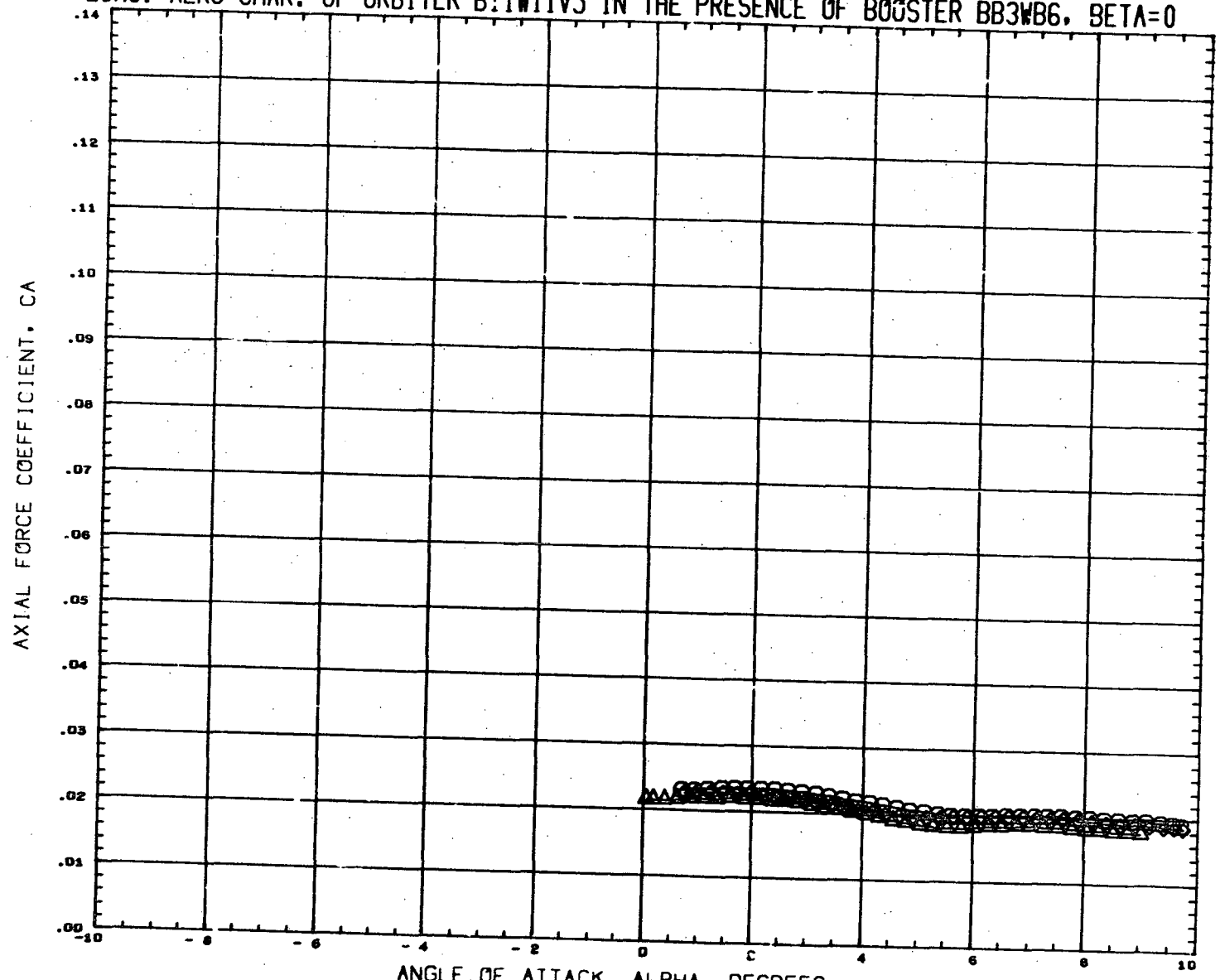
BETA	- 0.024	MACH		0.900
ALPB	3.908	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

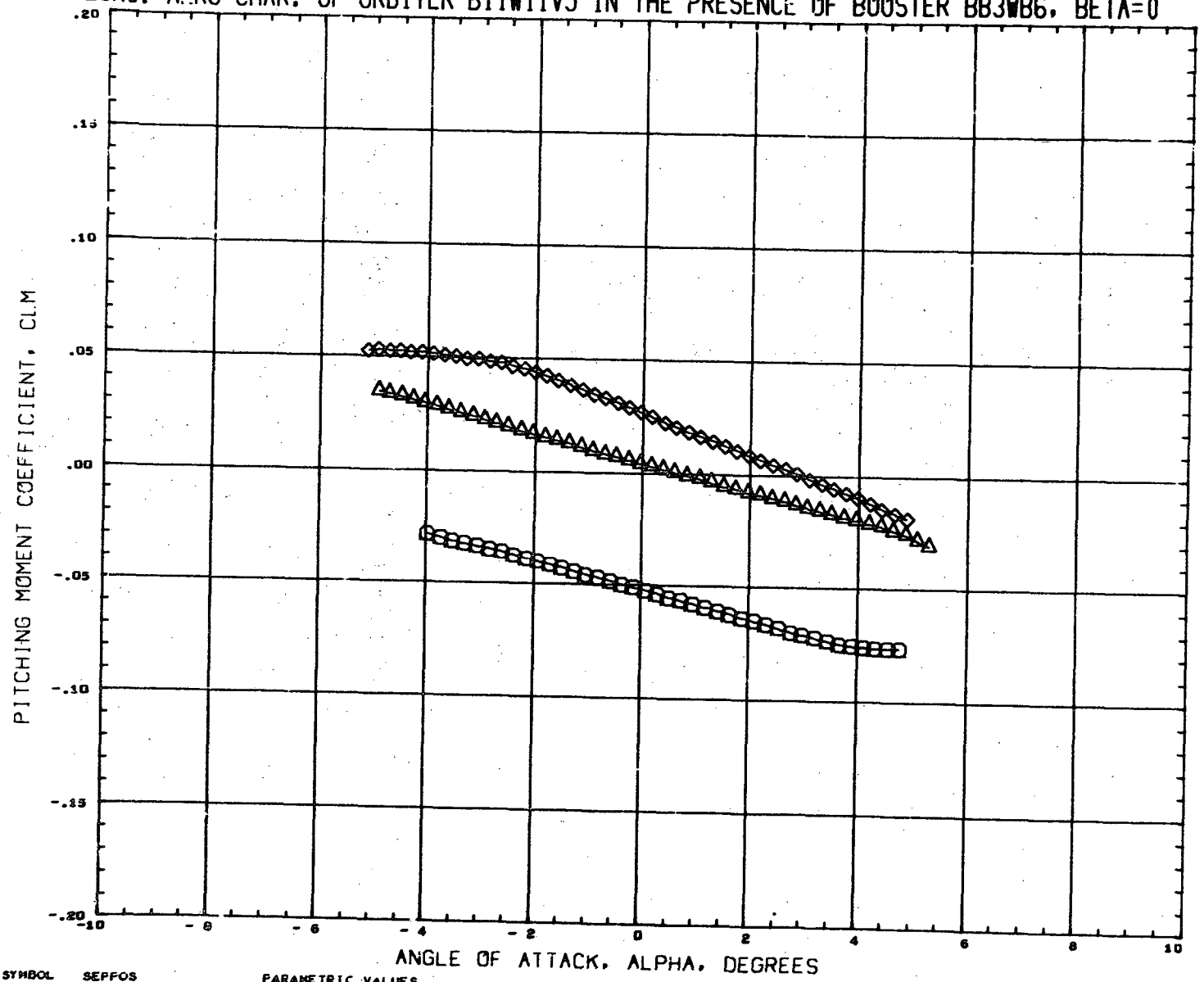
BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPFOS
◇	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

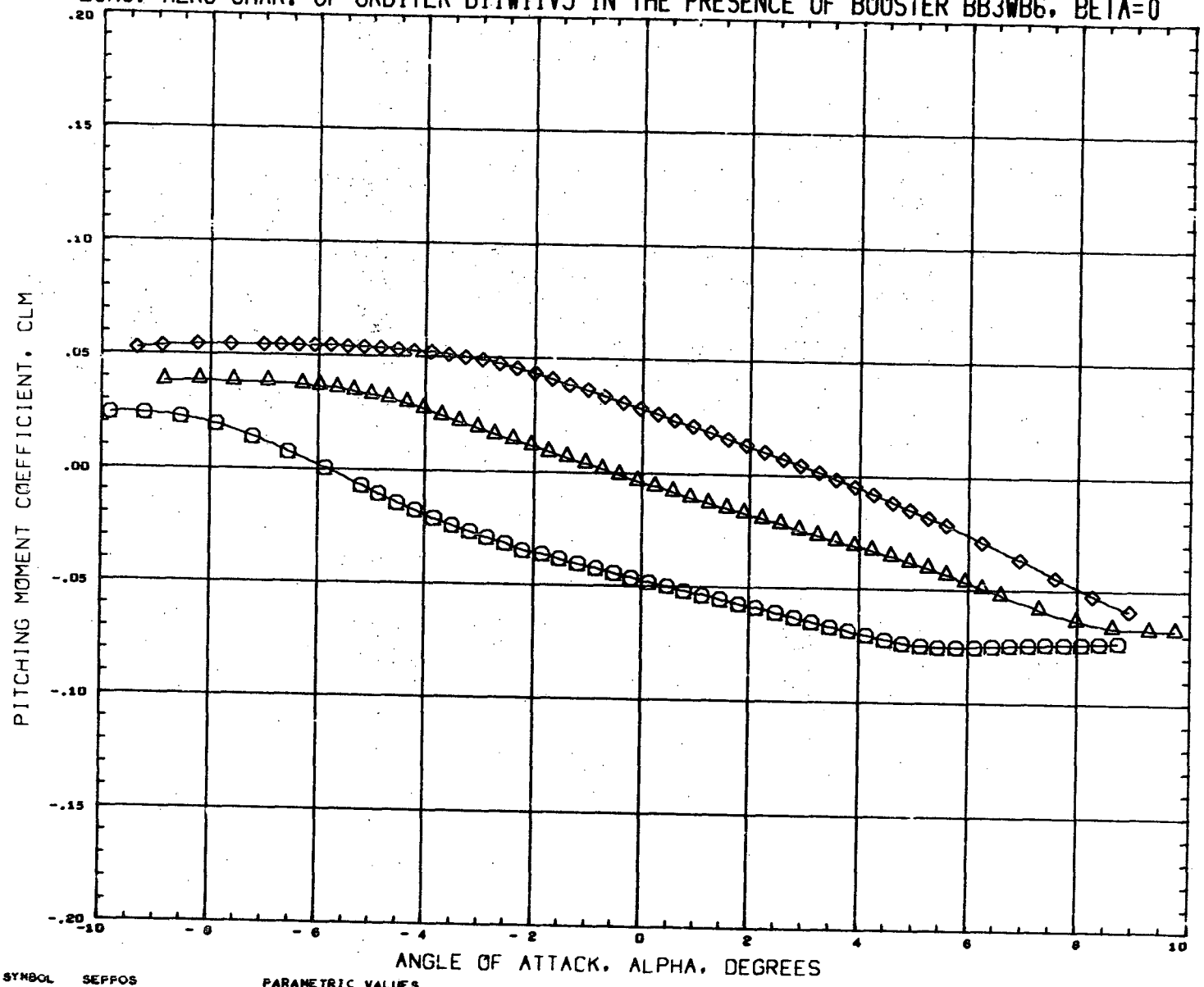
BETA	- 0.033	MACH	1.090
ALFB	0.195	BETB	- 0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



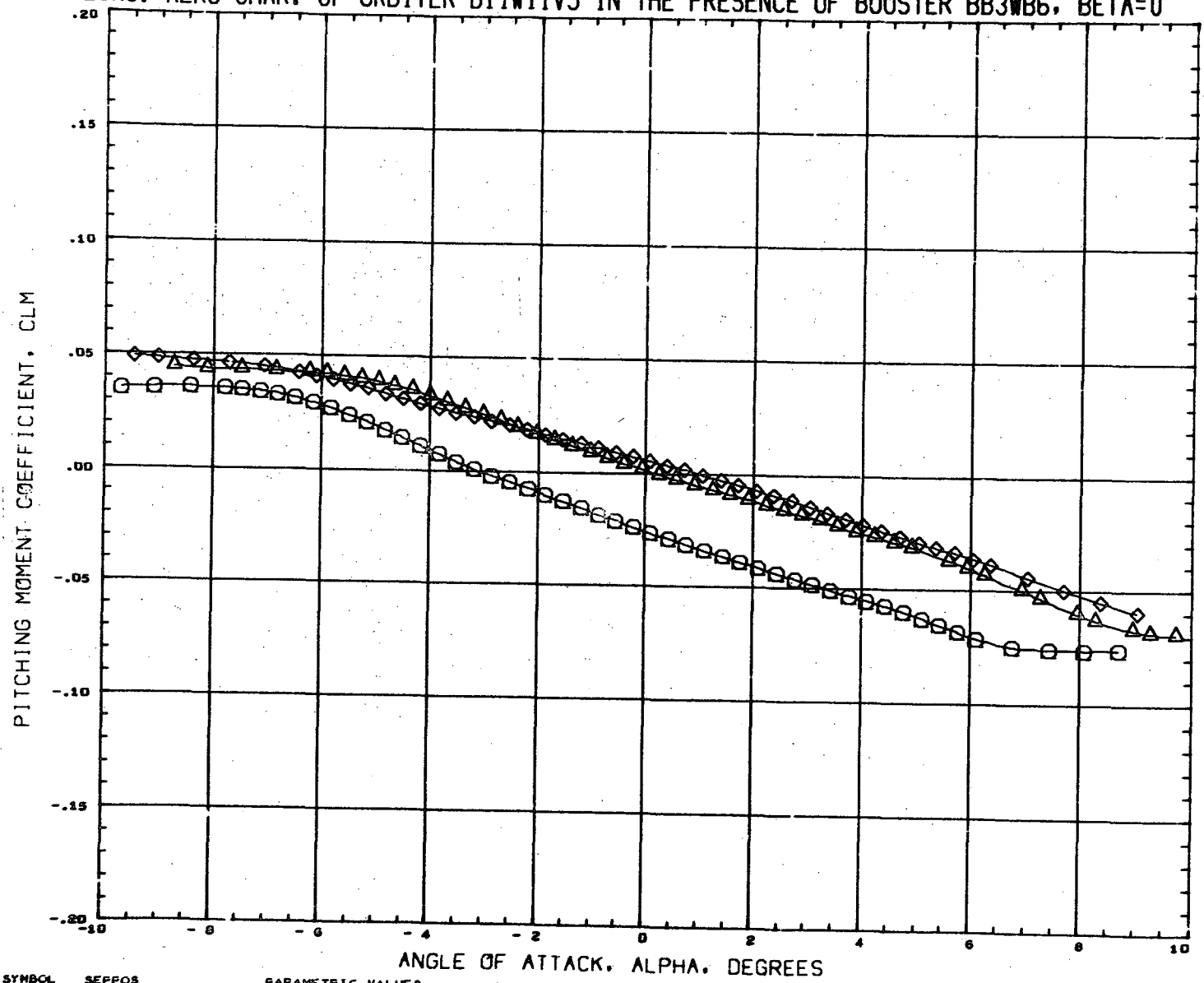
SYMBOL	SEFPOS		PARAMETRIC VALUES			
○	0.004	BETA	- 0.033	MACH		1.090
△	0.005	ALPB	0.195	RETB	-	0.016
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFFOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

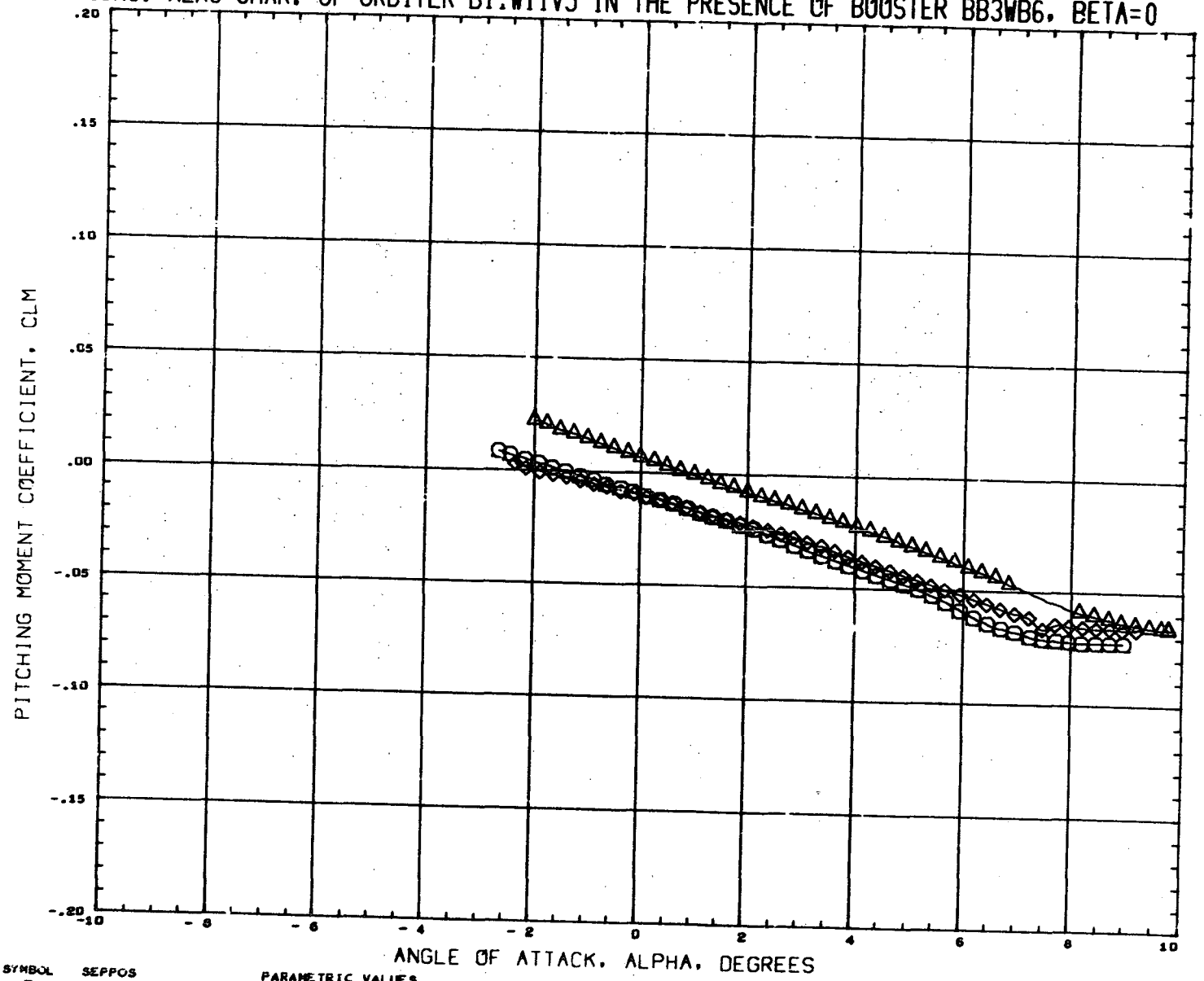
BETA	-	0.033	MACH		1.090
ALPB		0.195	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	- 0.033	MACH	1.090
ALPB	0.195	BETB	- 0.016

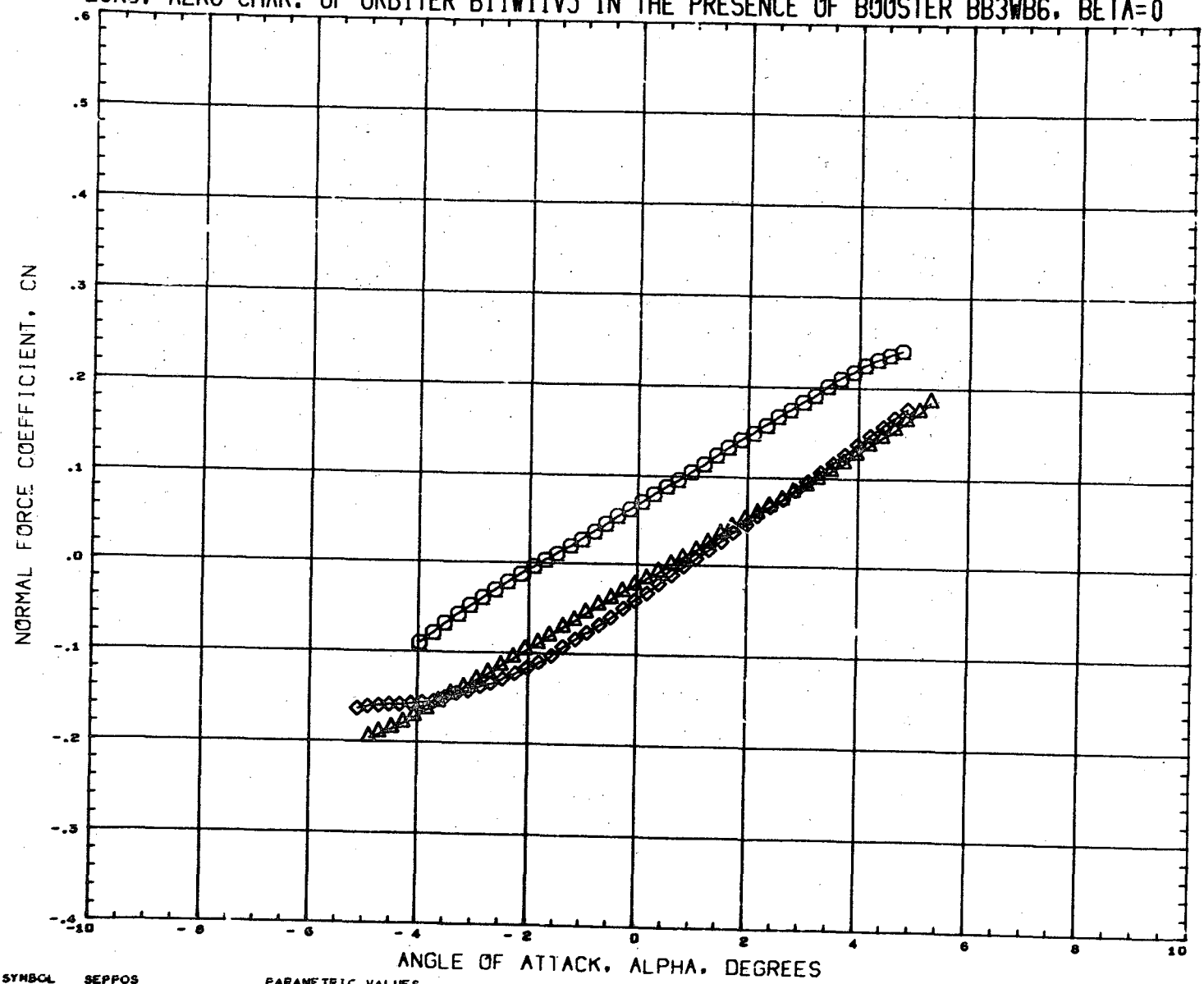
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WBC (RCU005) 21 JUN 71 PAGE 64

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

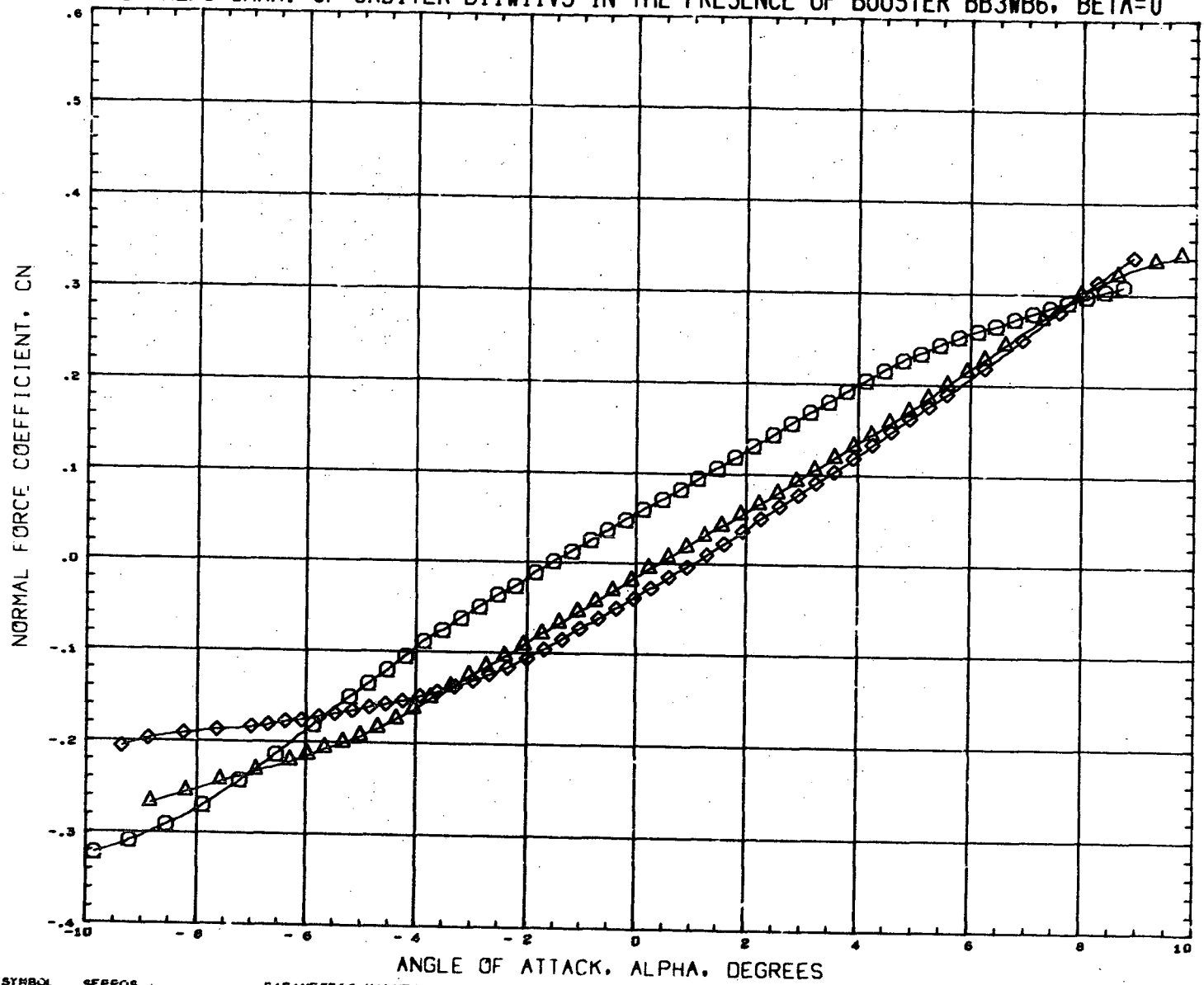
BETA	-	0.033	MACH		1.090
ALFB		0.195	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	IN

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



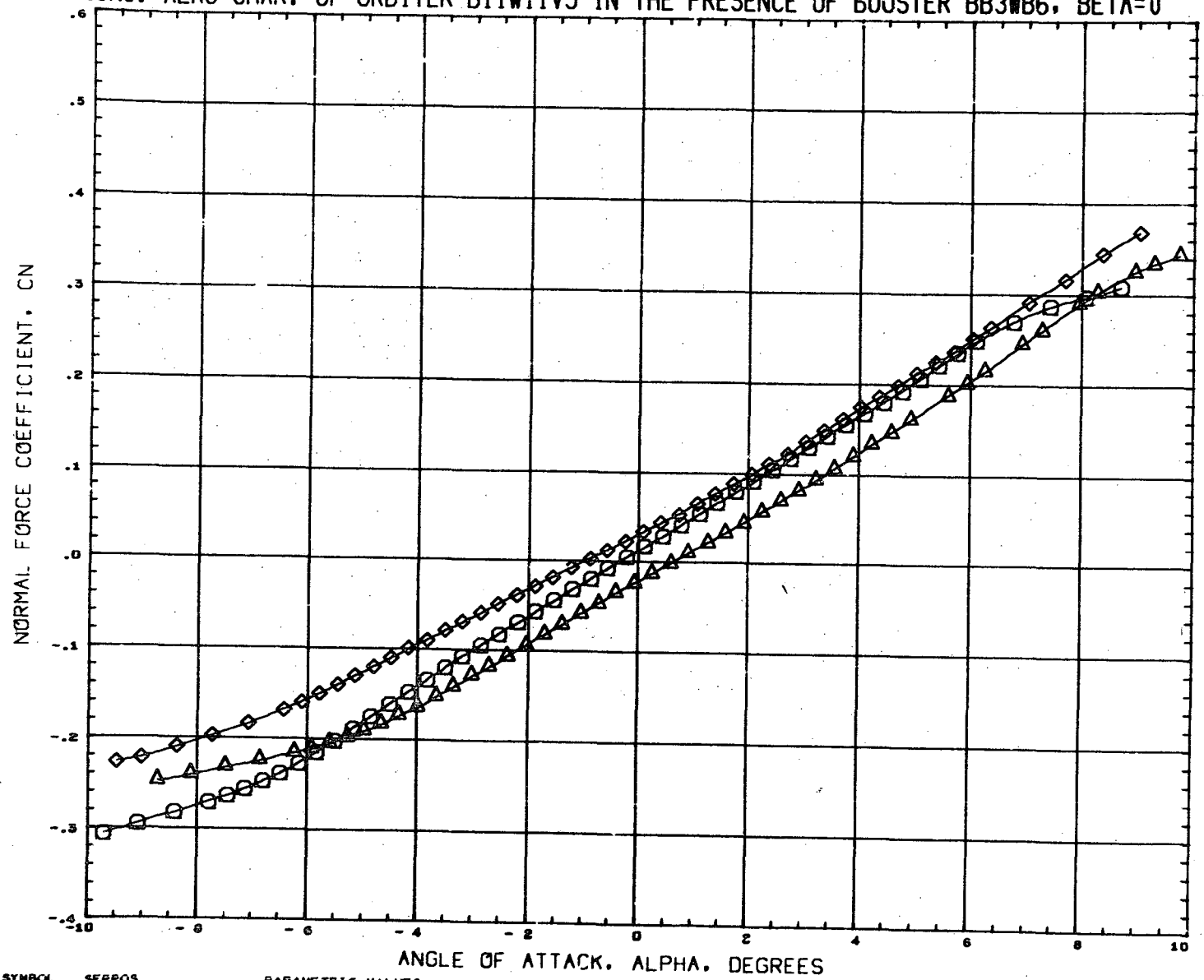
SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.004	BETA	- 0.033	MACH	1.090	
△	0.005	ALPB	0.195	BETB	- 0.016	
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



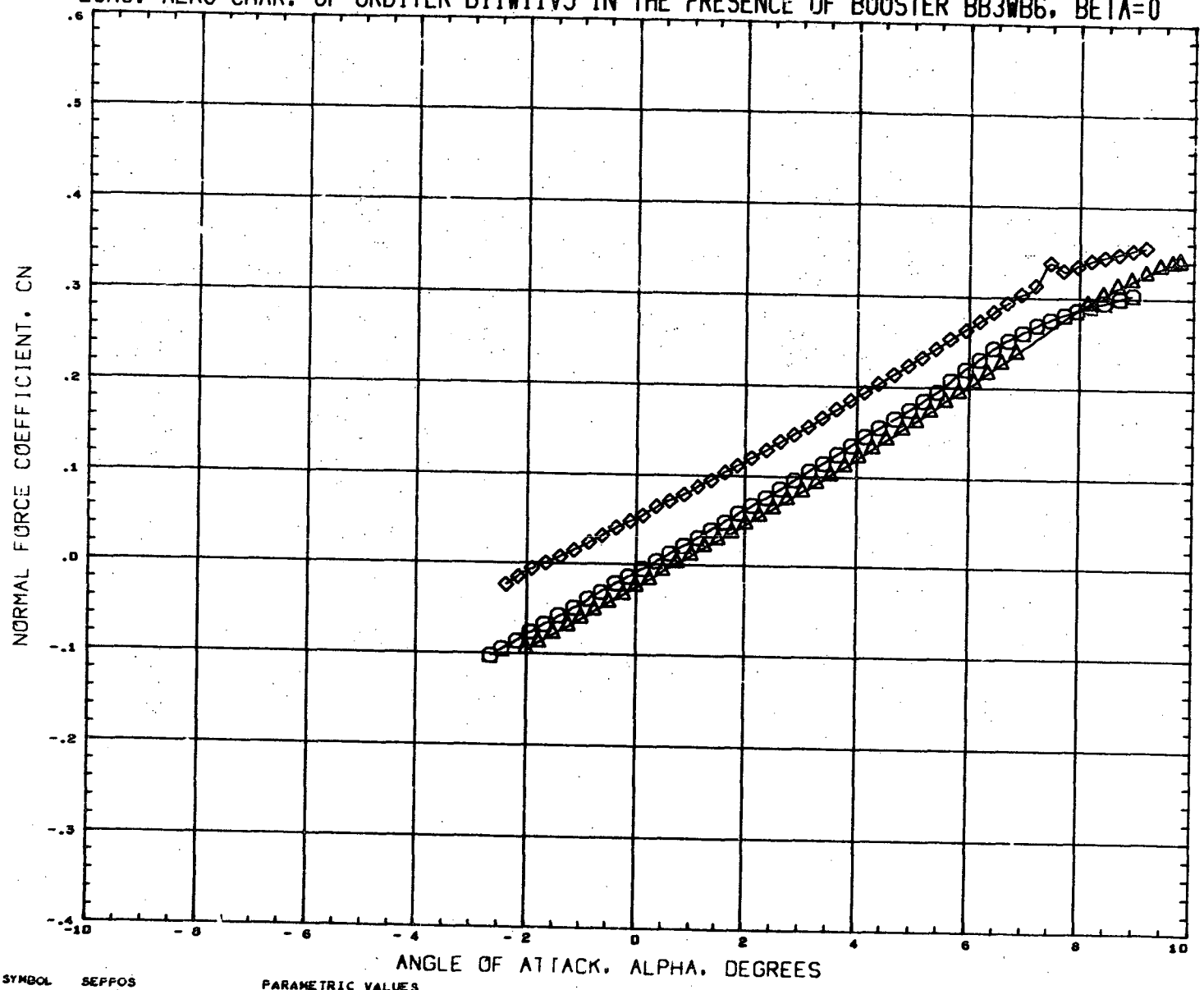
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.033	MACH		1.080
△	0.008	ALFB	0.195	BETB	-	0.016
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



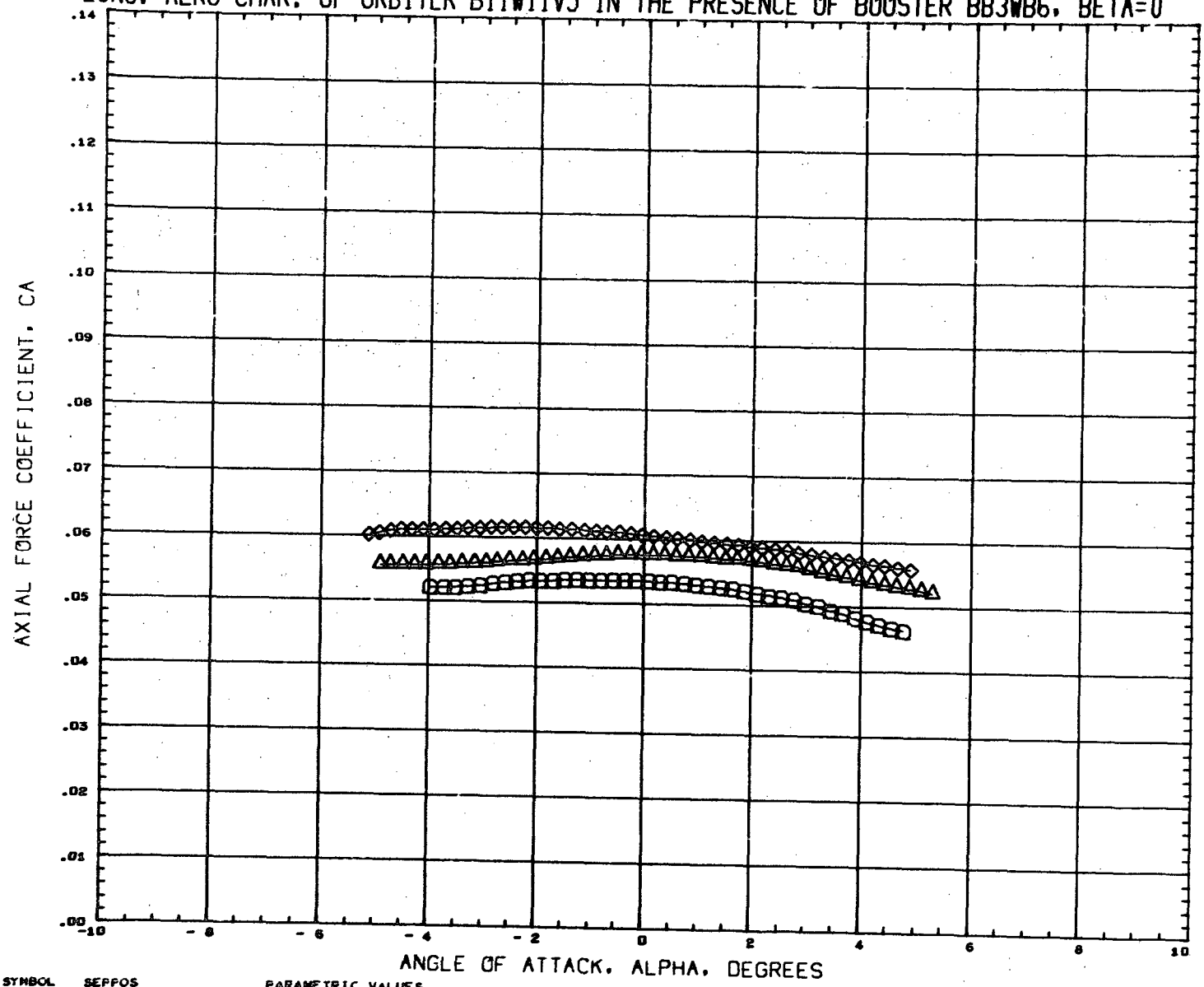
SYMBOL	SEFPOS		PARAMETRIC VALUES			
△	0.010	BETA	- 0.033	MACH		1.090
◇	0.011	ALPB	0.195	BETB	-	0.016
	0.012					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LØNG. AERØ CHAR. ØF ØRBITER B11W11V5 IN THE PRESENCE ØF BØØSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

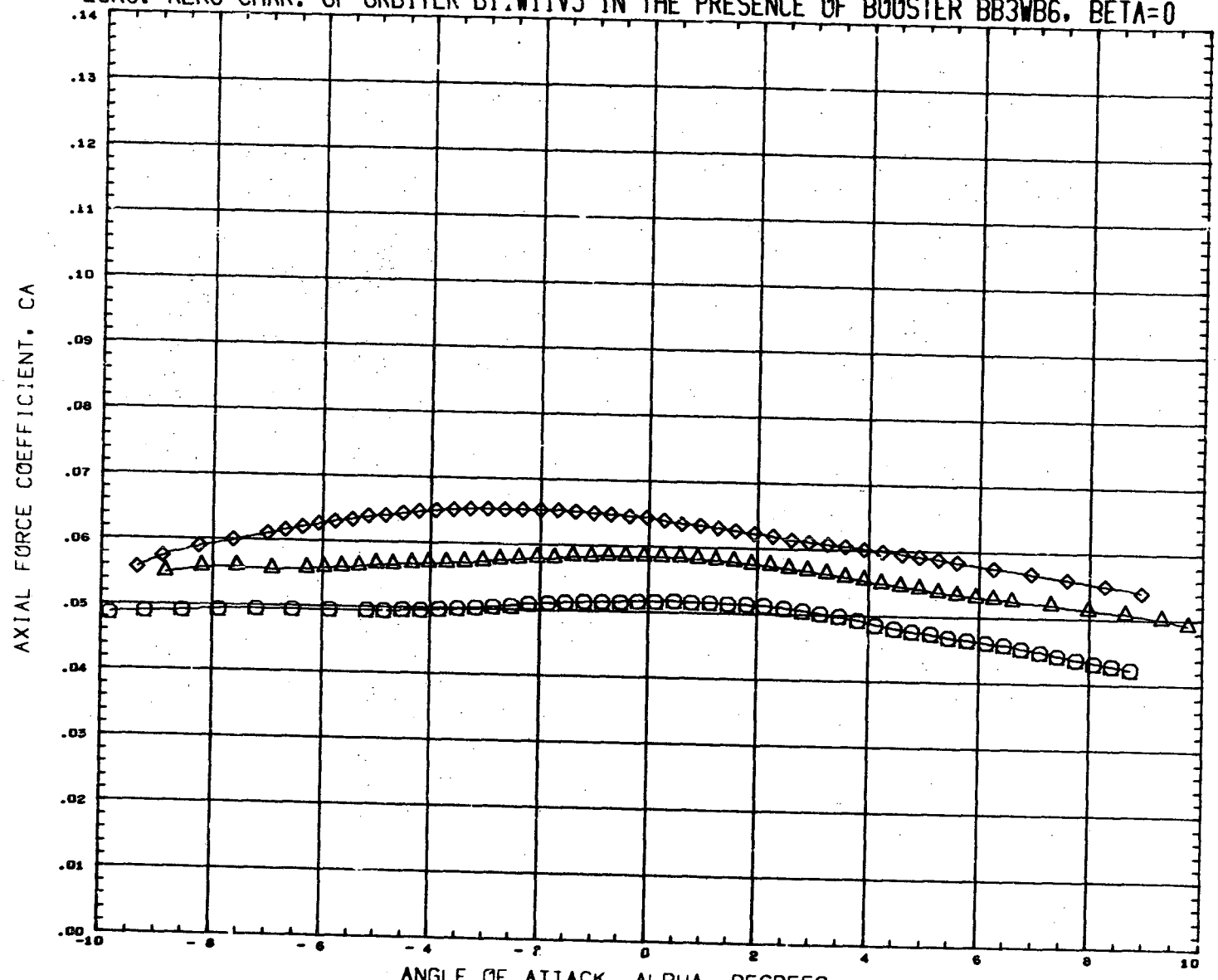
BETA	-	0.033	MACH		1.090
ALPB		0.195	BETB	-	0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



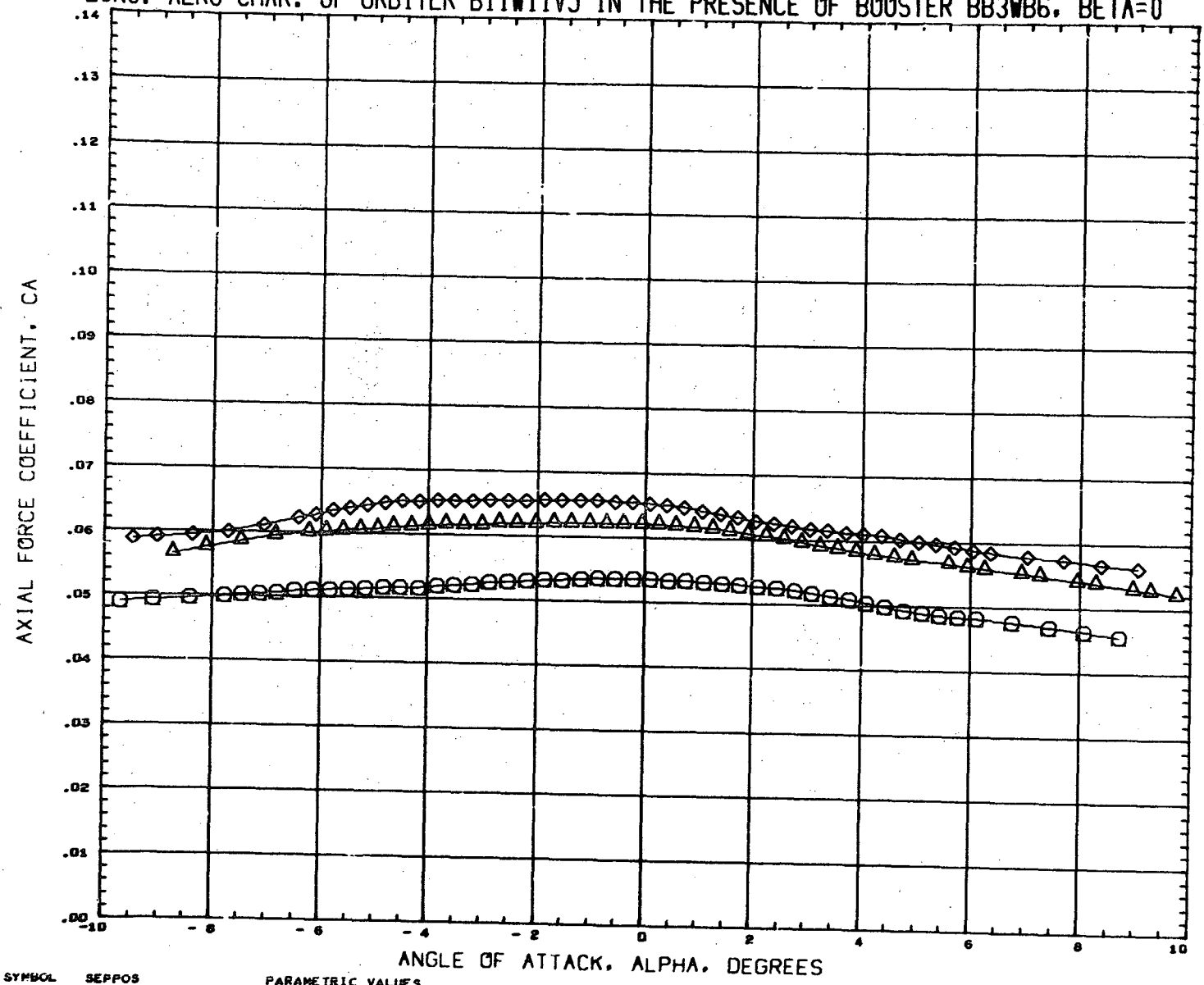
SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.004	BETA	- 0.033	MACH		1.090
△	0.005	ALFB	0.195	BETB	-	0.016
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

BETA	-	0.033	MACH		1.090
ALPB		0.195	BETB	-	0.016

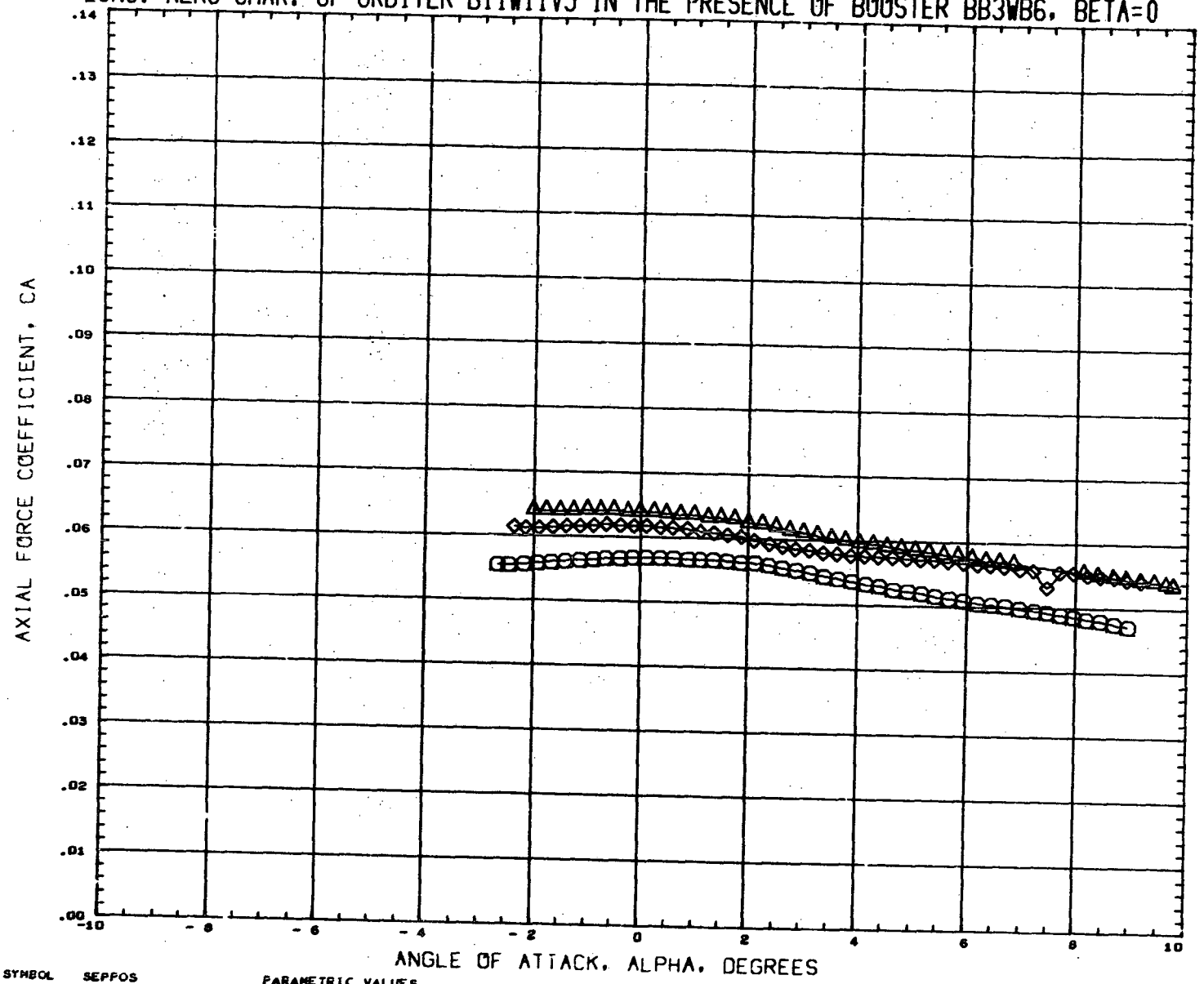
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.9750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

MSC S-3C ORBITER B11W11V5 NEAR BB3WB3 (RCU005) 21 JUN 71 PAGE 71

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
△	0.010
◇	0.011
	0.012

PARAMETRIC VALUES

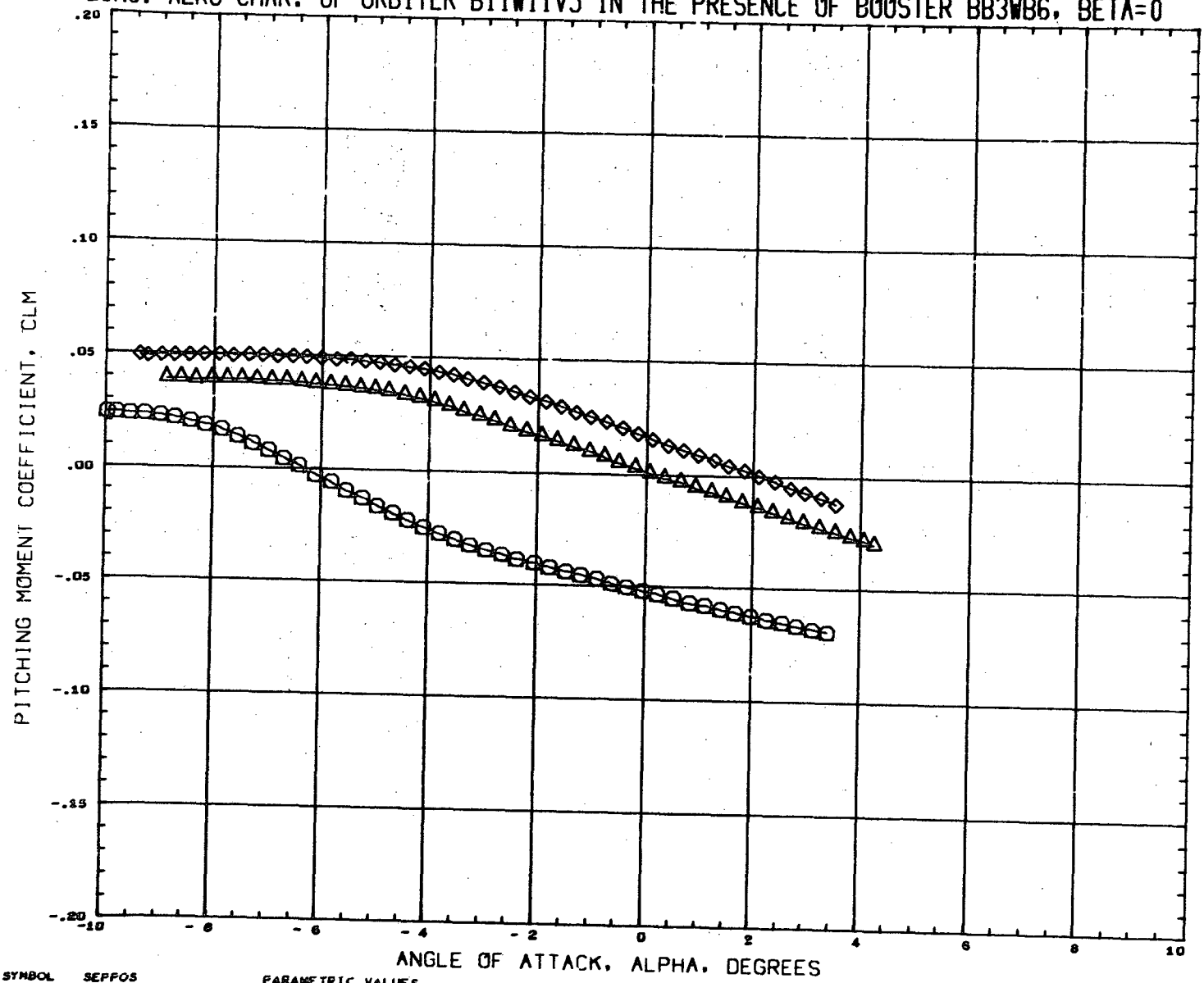
BETA	- 0.033	MACH	1.090
ALPB	0.195	BETB	- 0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0086	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPFOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

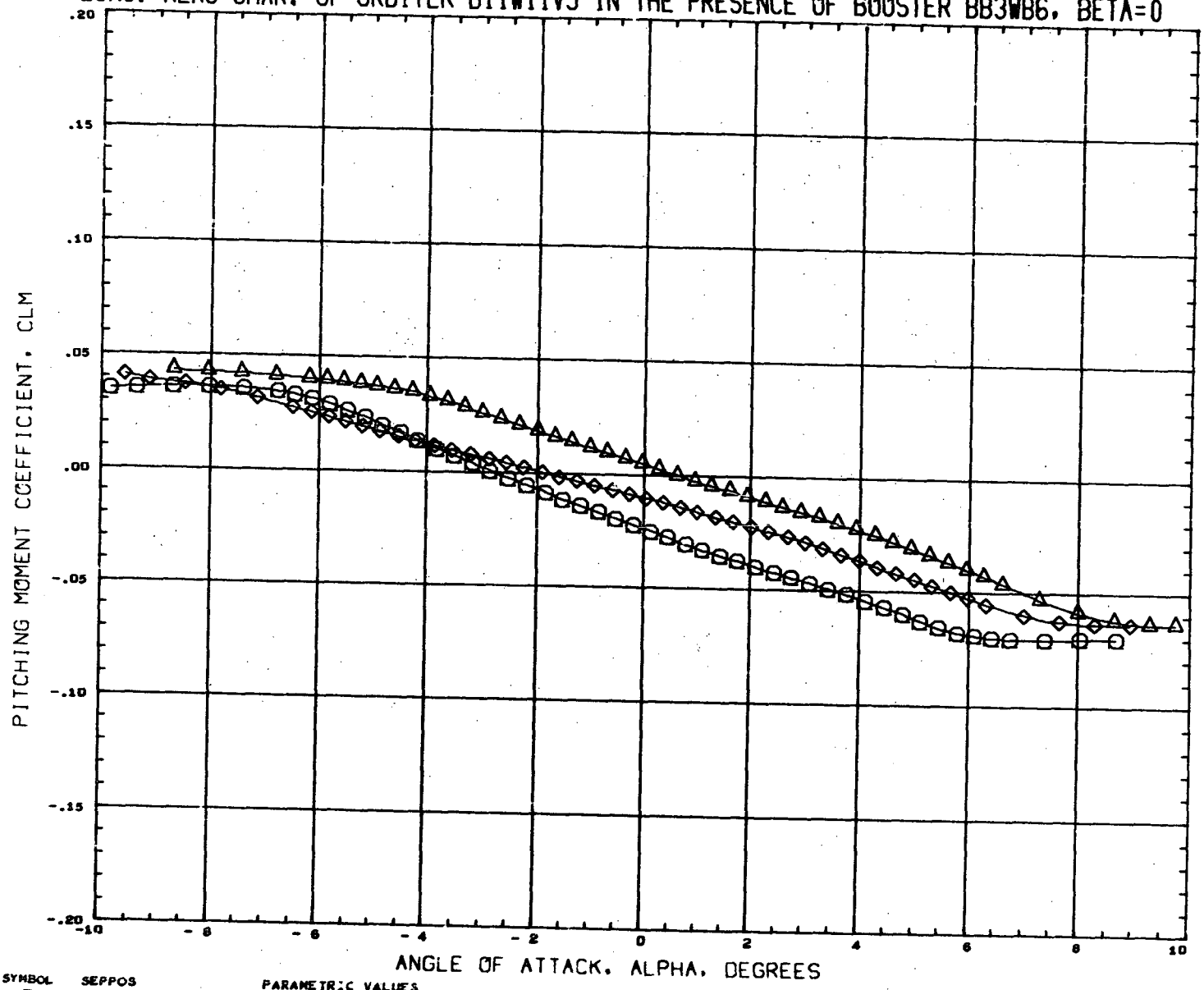
BETA	-	0.026	MACH		1.100
ALFB	-	5.257	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0

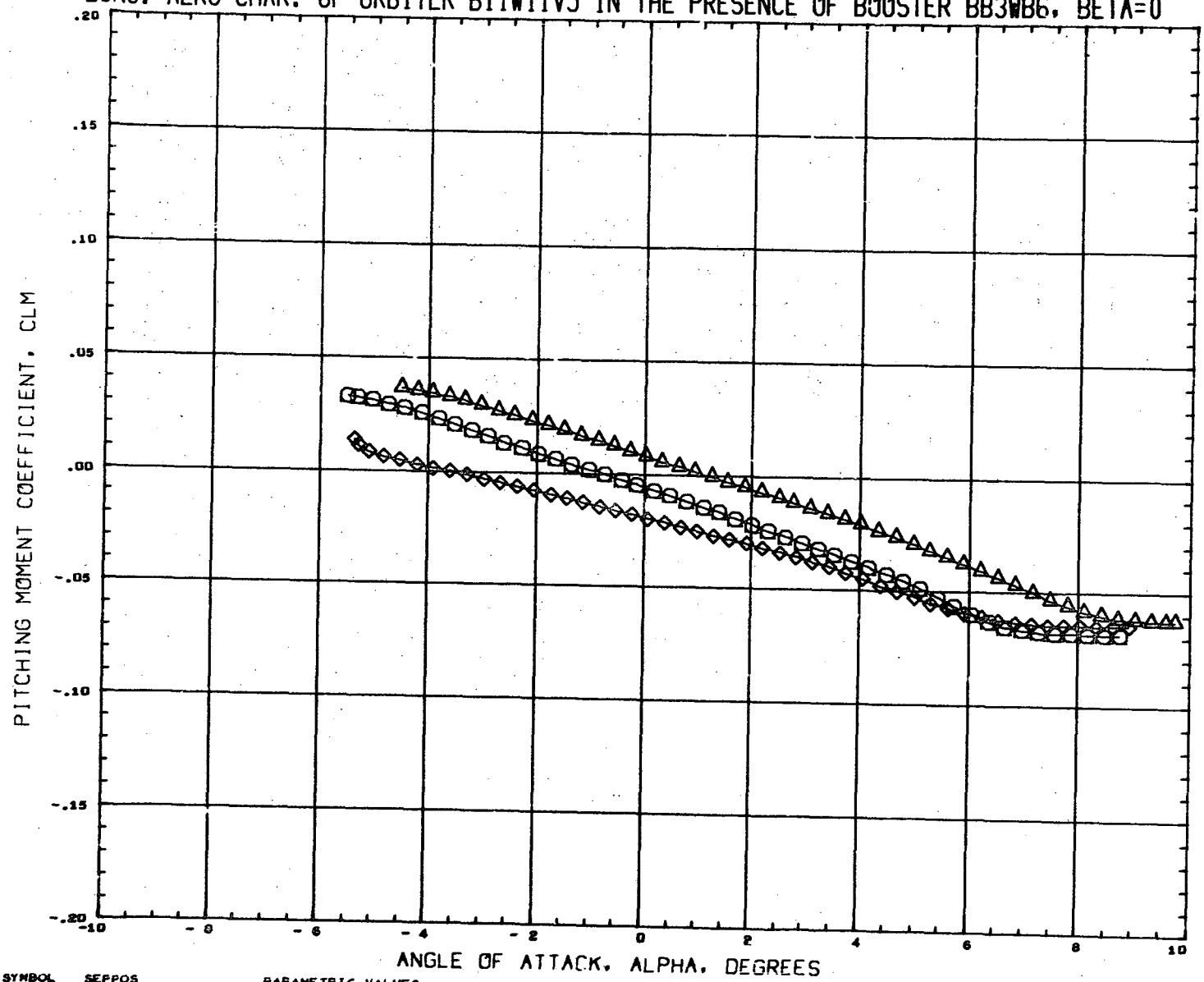


SYMBOL	SEPPOS	PARAMETRIC VALUES					
△	0.007	BETA	- 0.026	MACH	1.100		
○	0.008	ALPB	- 5.257	SETB	- 0.016		
◇	0.009						

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

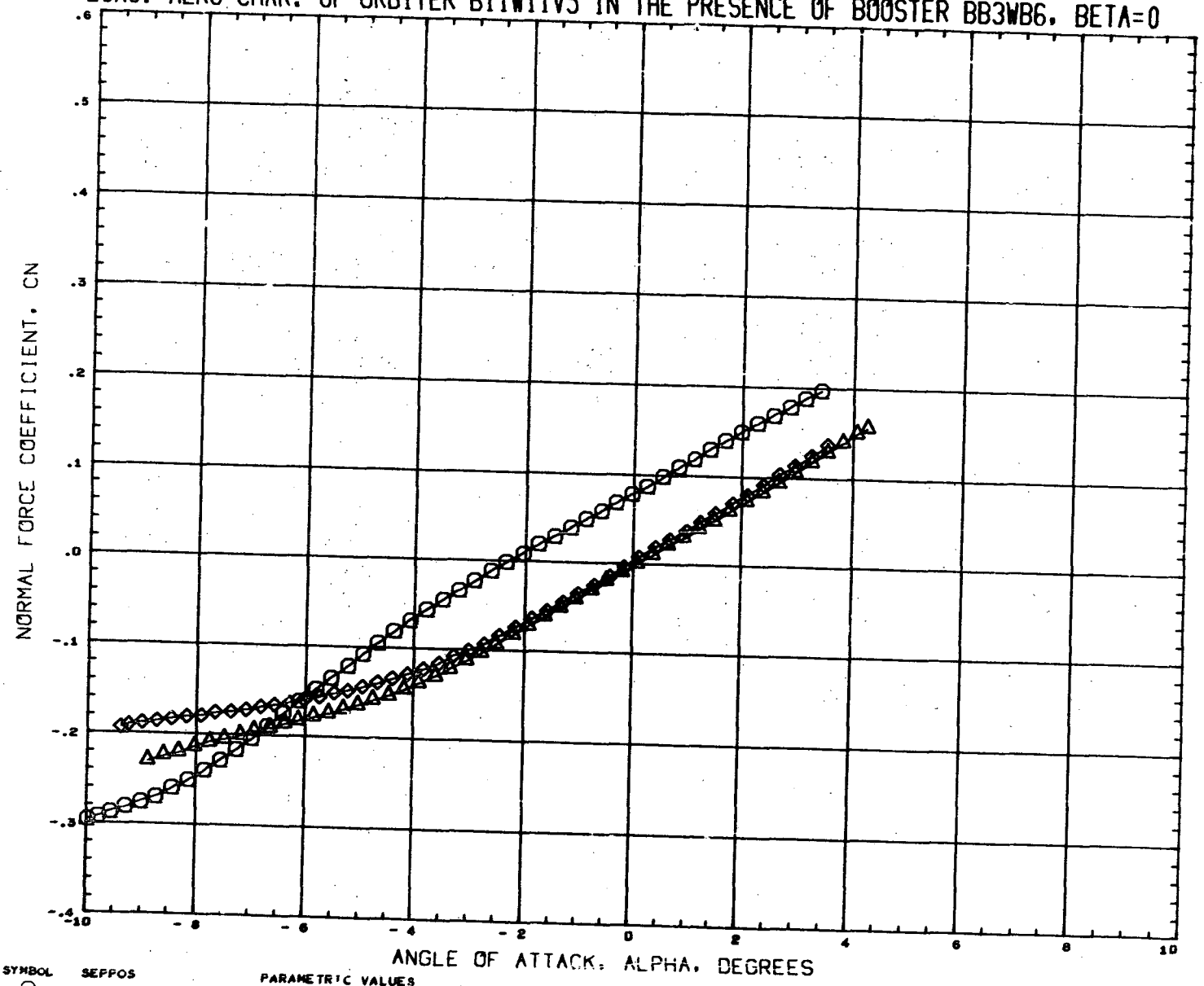
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	RETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

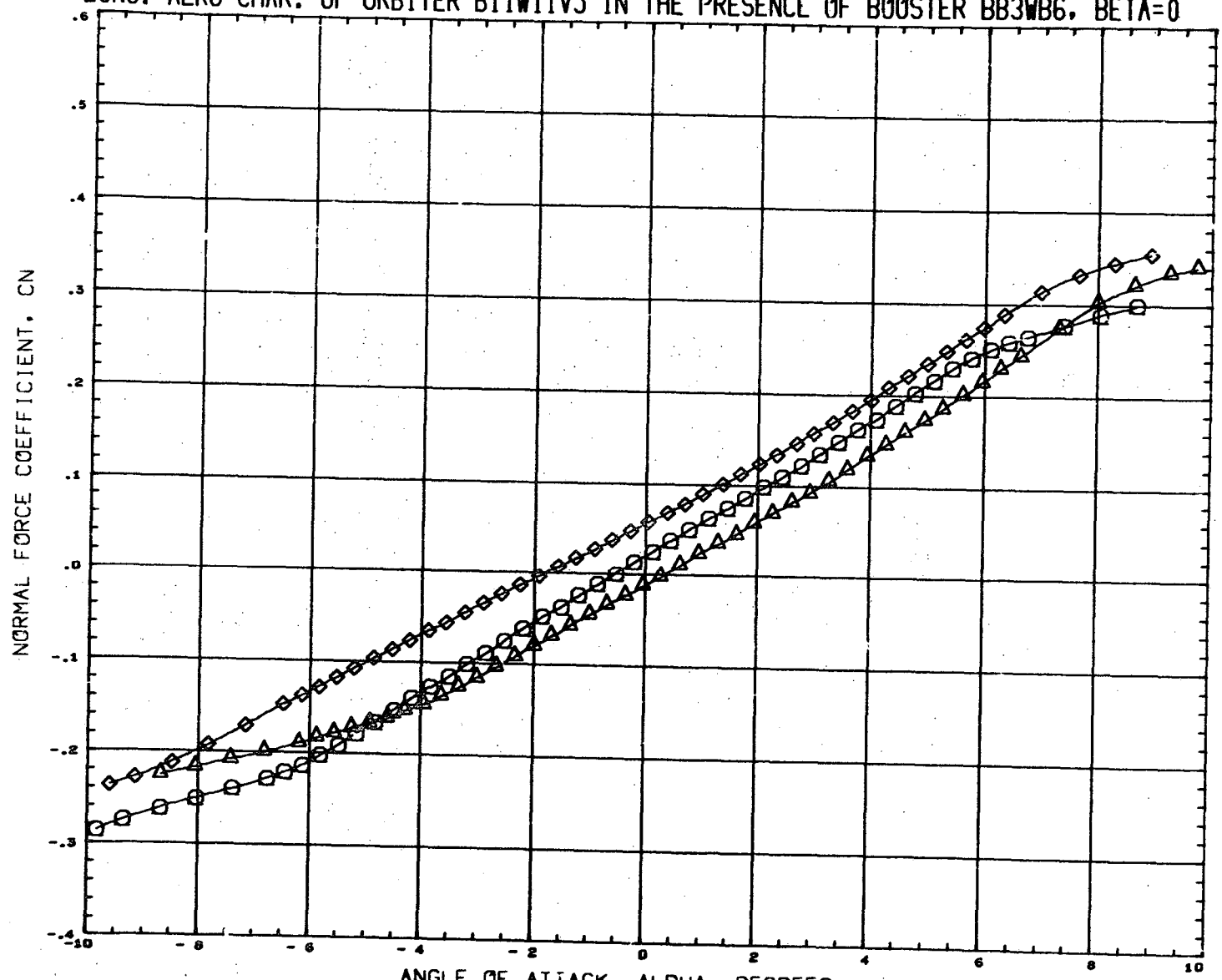
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

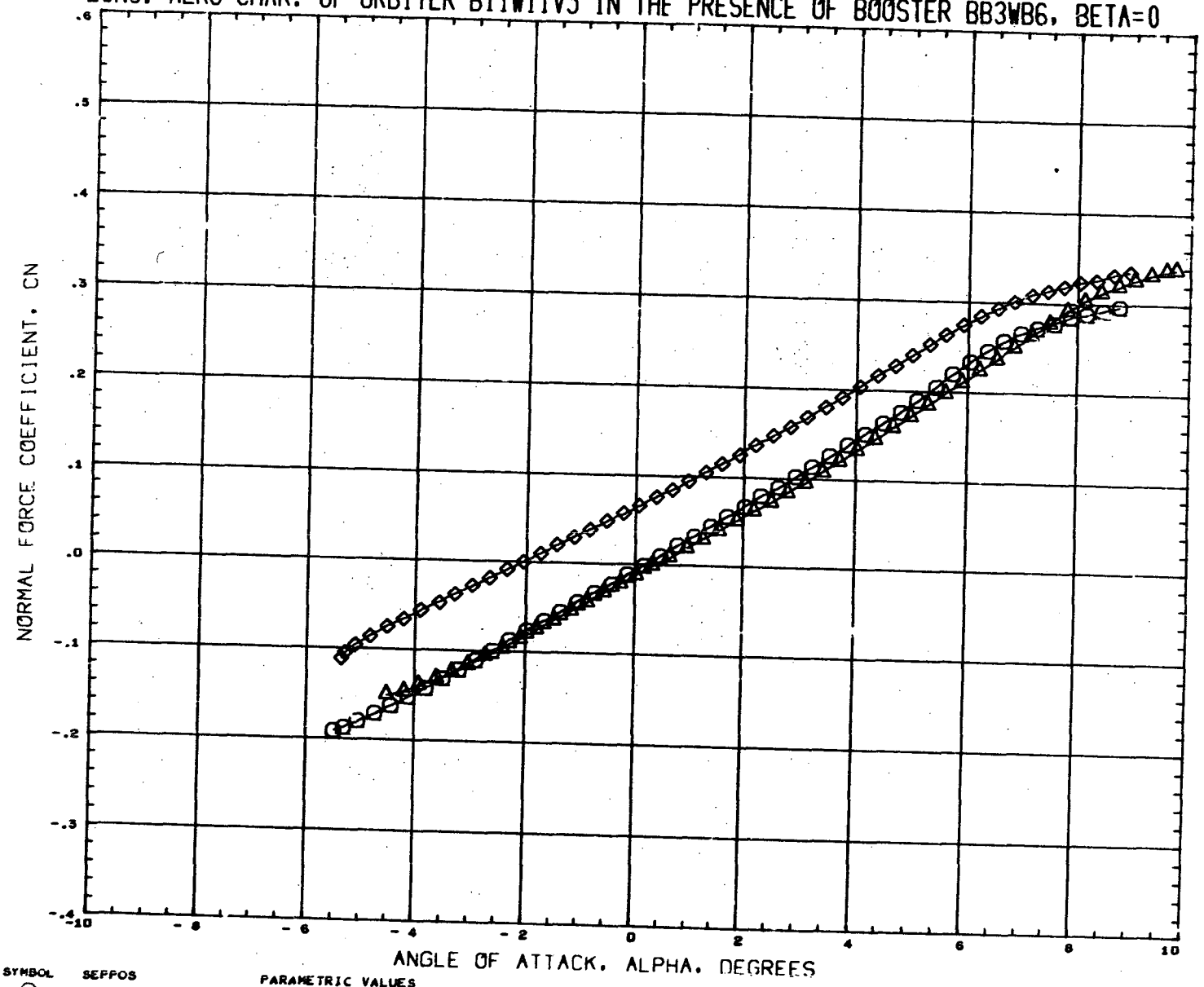
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFPOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

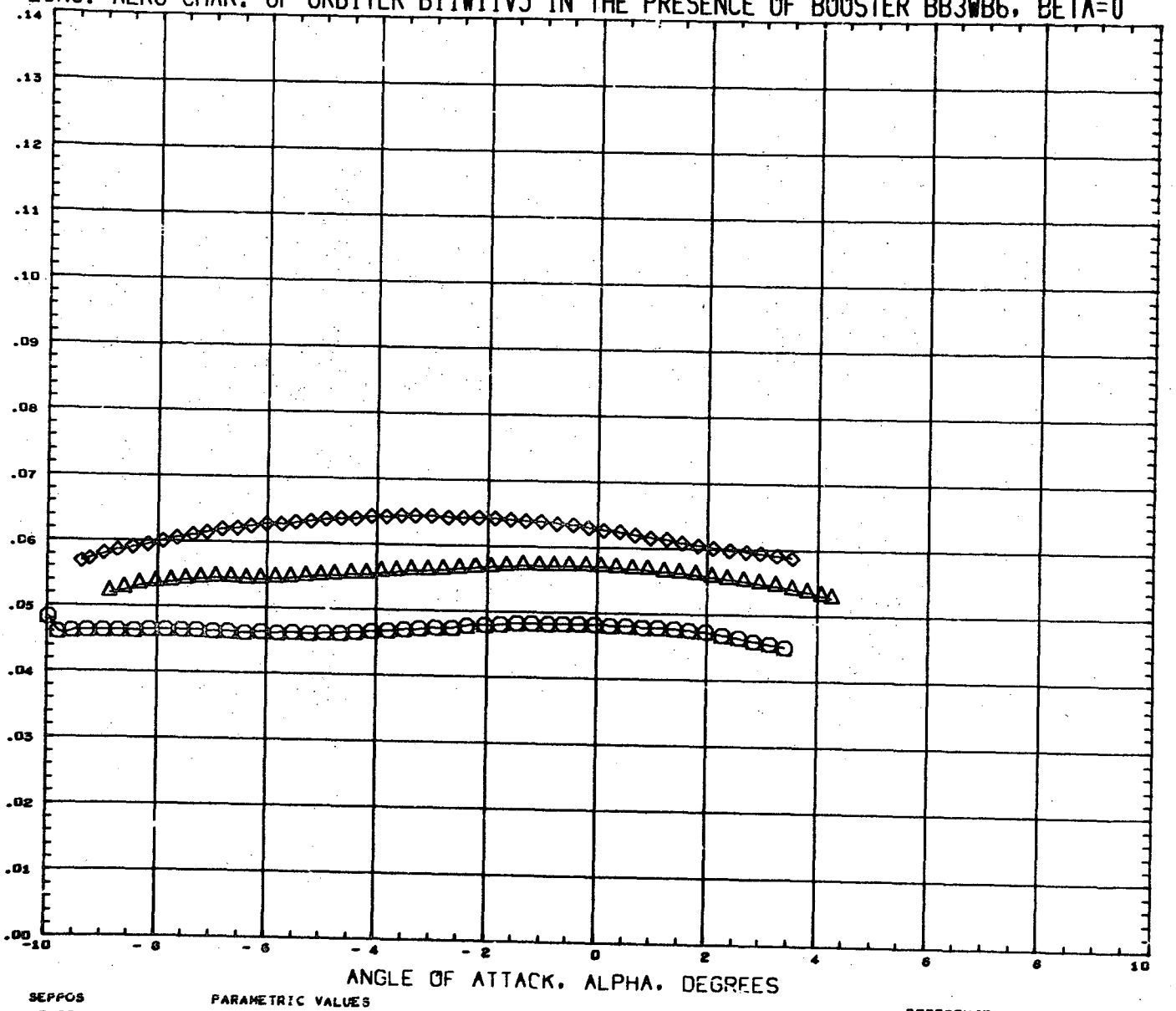
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WBC (RCU013) 21 JUN 71 PAGE 78

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

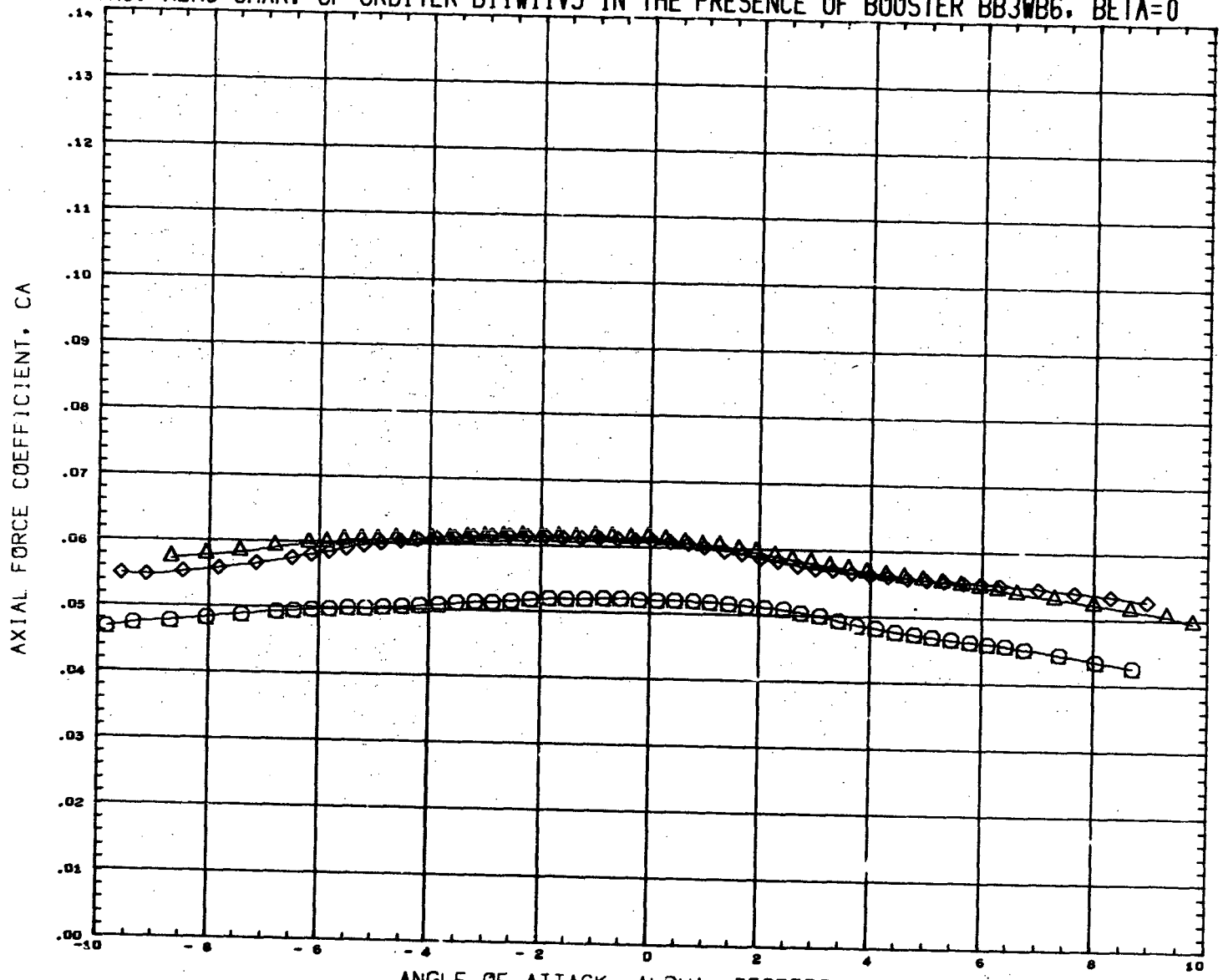
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

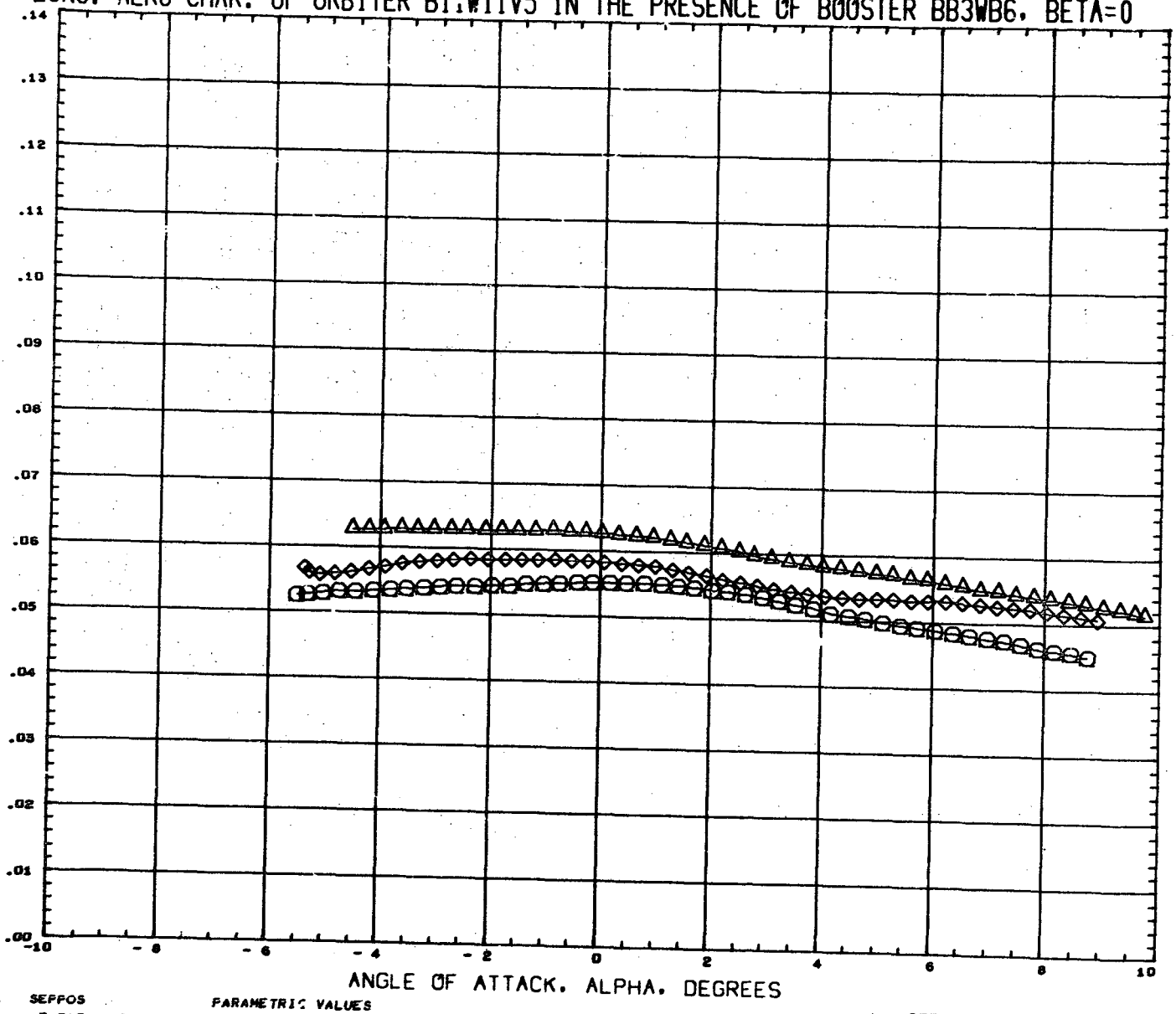
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEFFOS
△	0.010
○	0.011
◇	0.012

PARAMETRIC VALUES

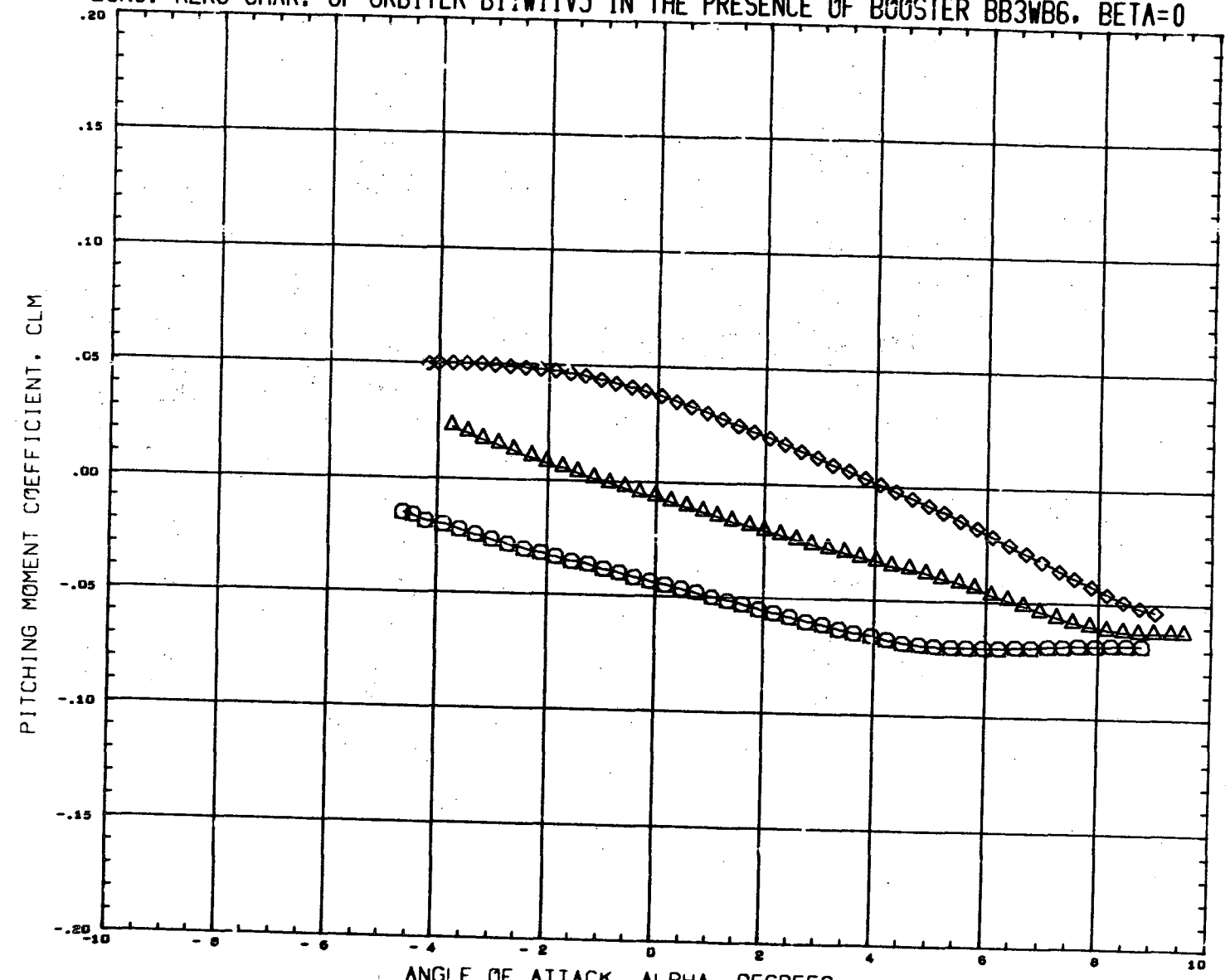
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

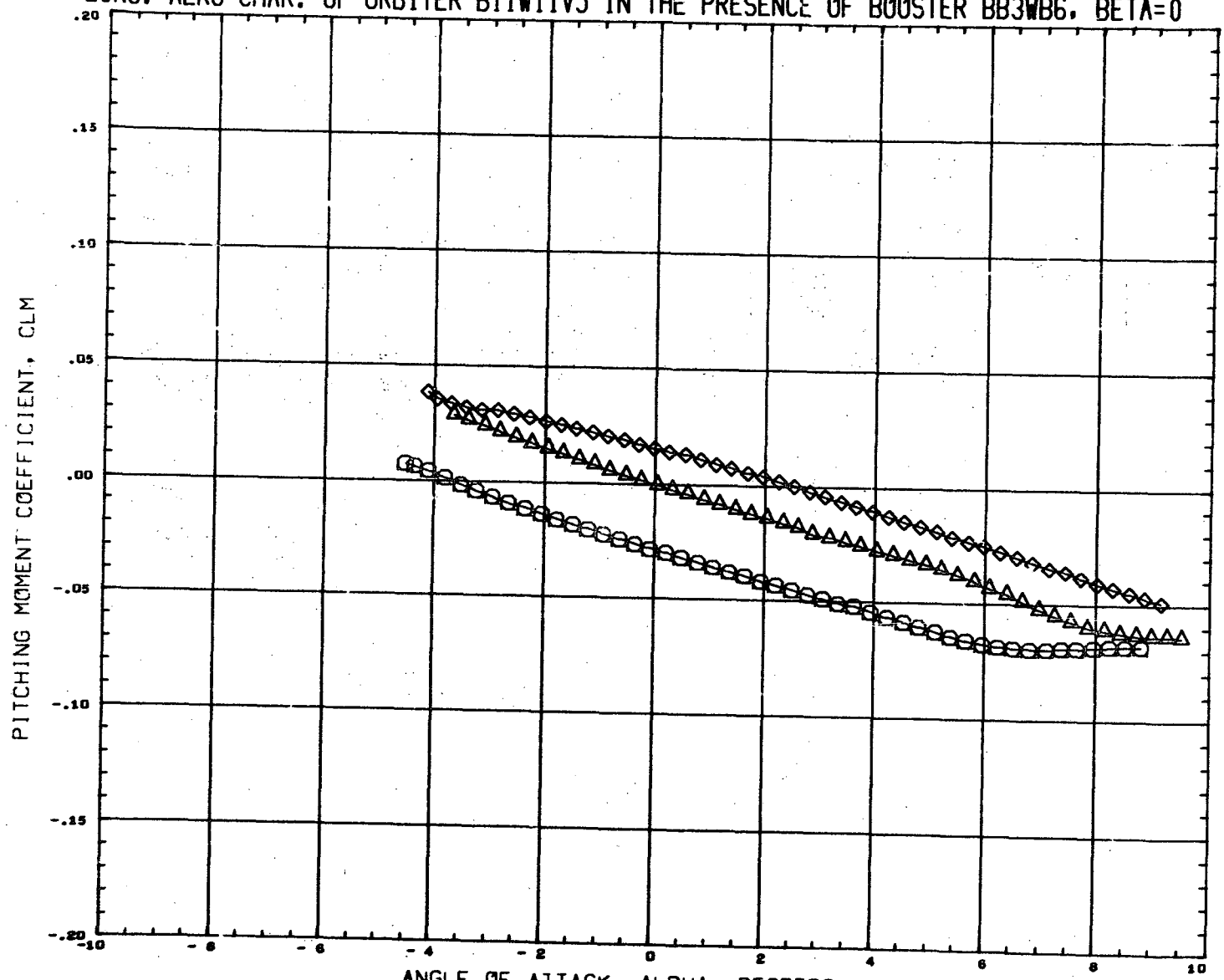
BETA	- 0.021	MACH	1.100
ALPB	3.901	BETB	- 0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



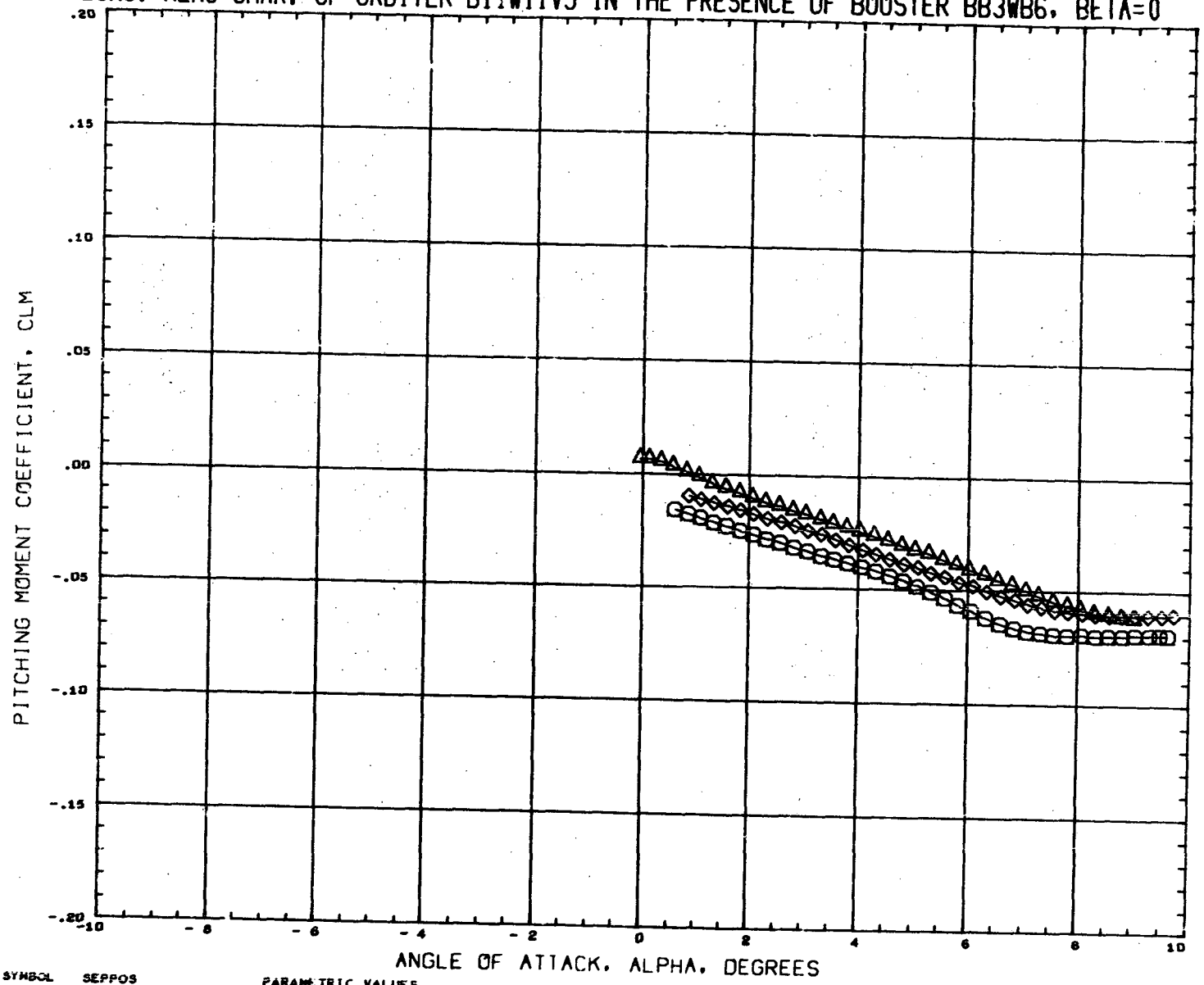
SYMBOL	SEFFOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.021	MACH	1.100	
△	0.008	ALPB	3.901	BETB	- 0.008	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8620	IN
BREF	6.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



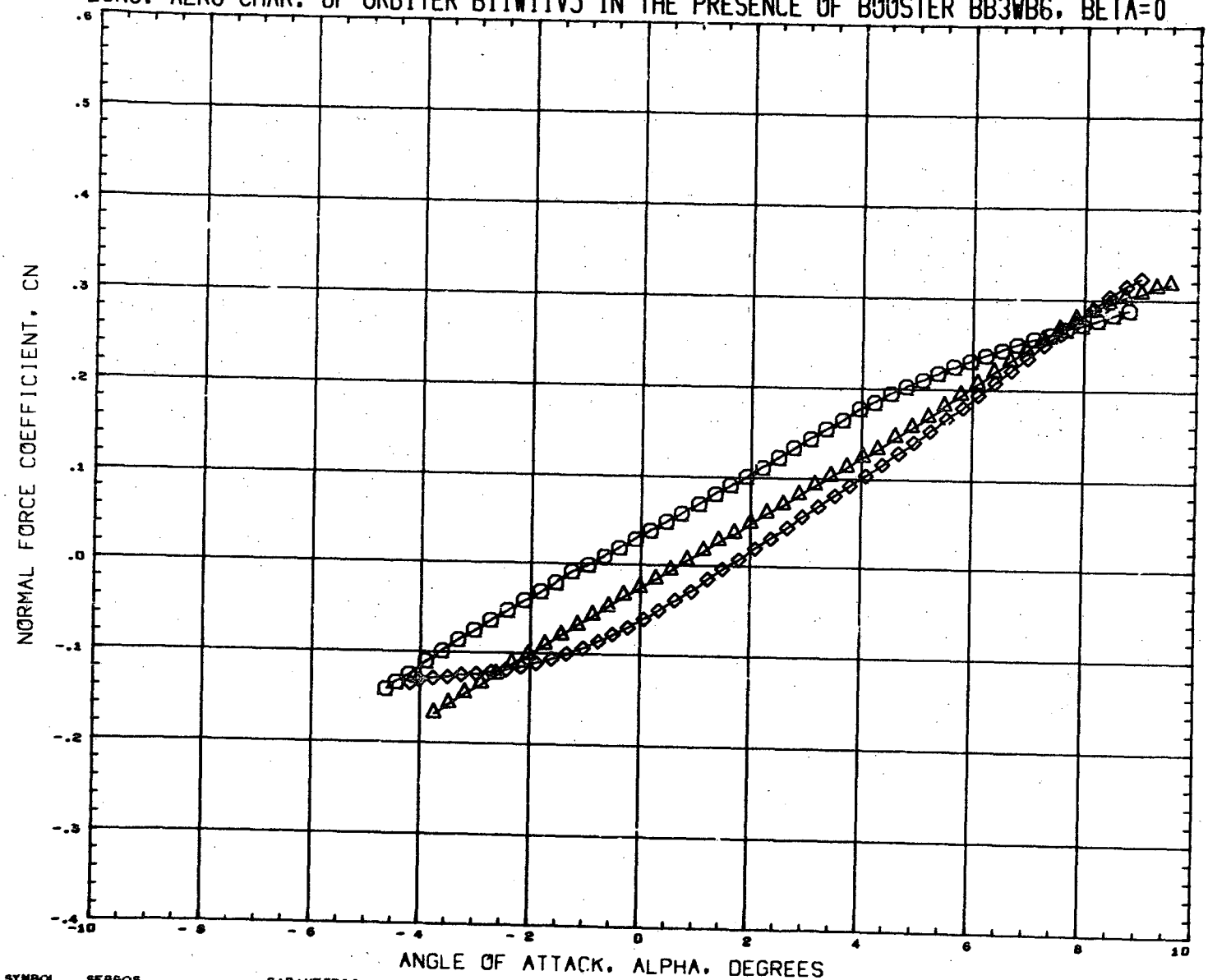
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.010	BETA	- 0.021	MACH	1.100
△	0.011	ALPB	3.901	BETB	- 0.008
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	71.7500	SQ IN
LREF	9.8820	IN
BREF	8.3750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

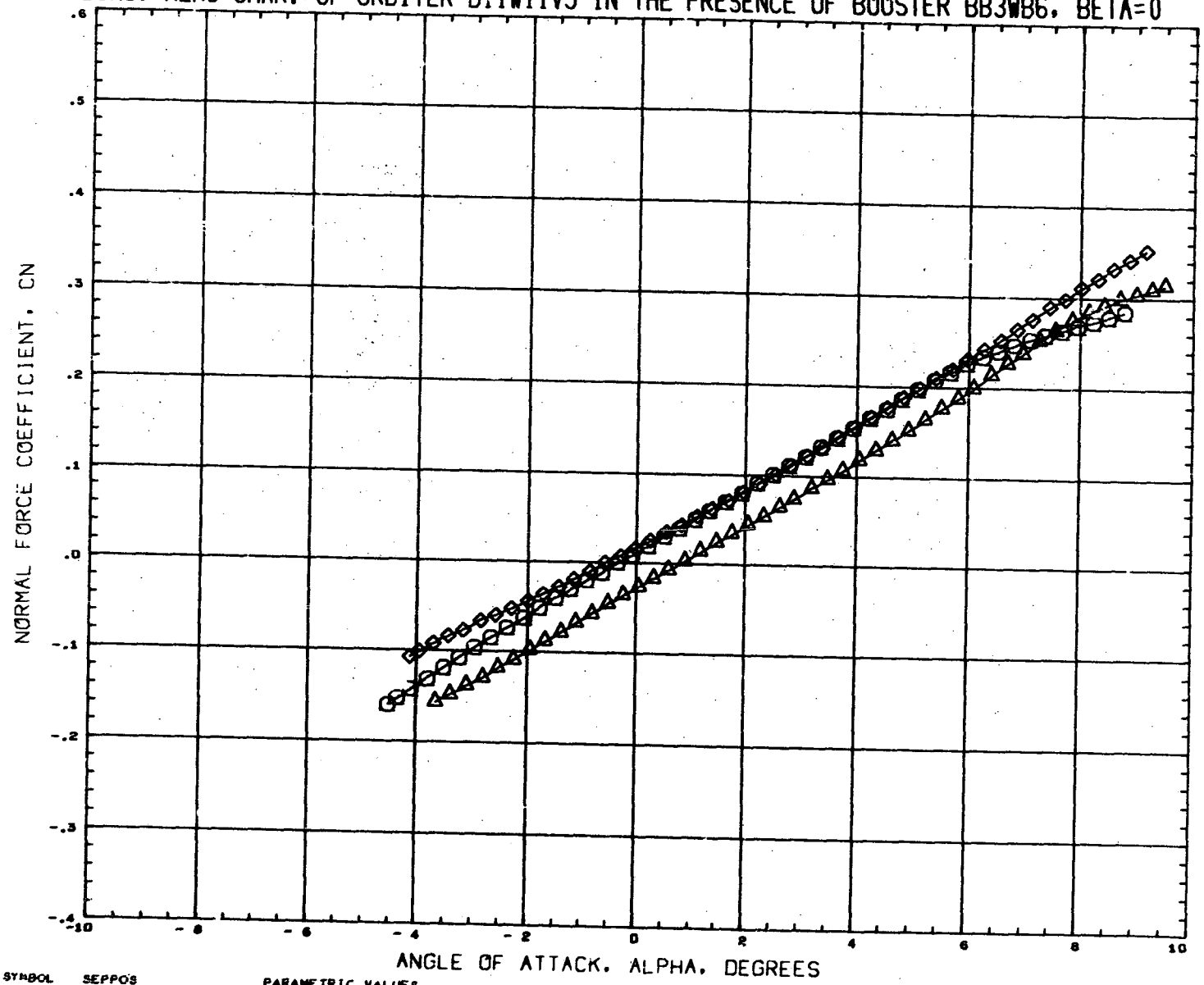
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
◇	0.007
△	0.008
○	0.009

PARAMETRIC VALUES

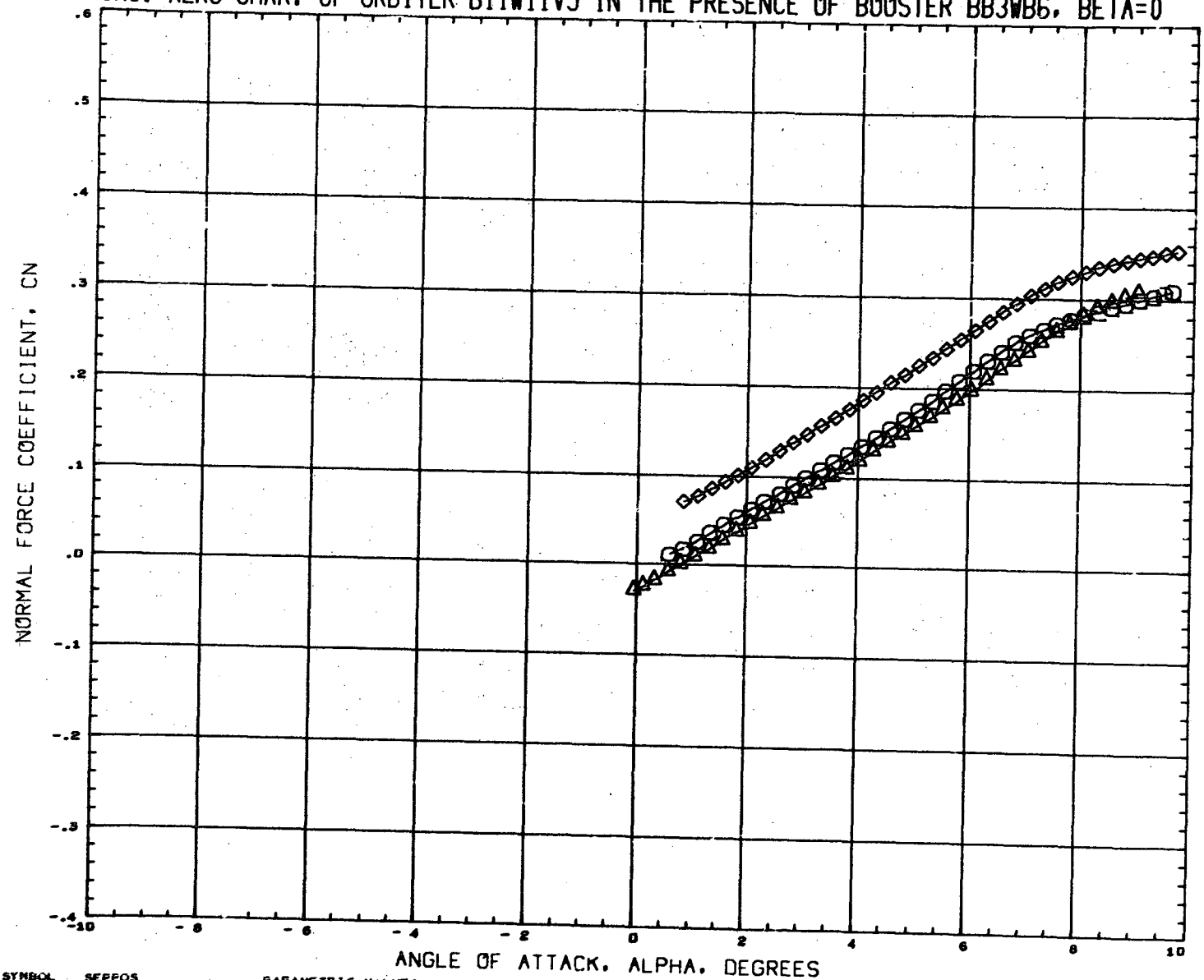
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPFOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

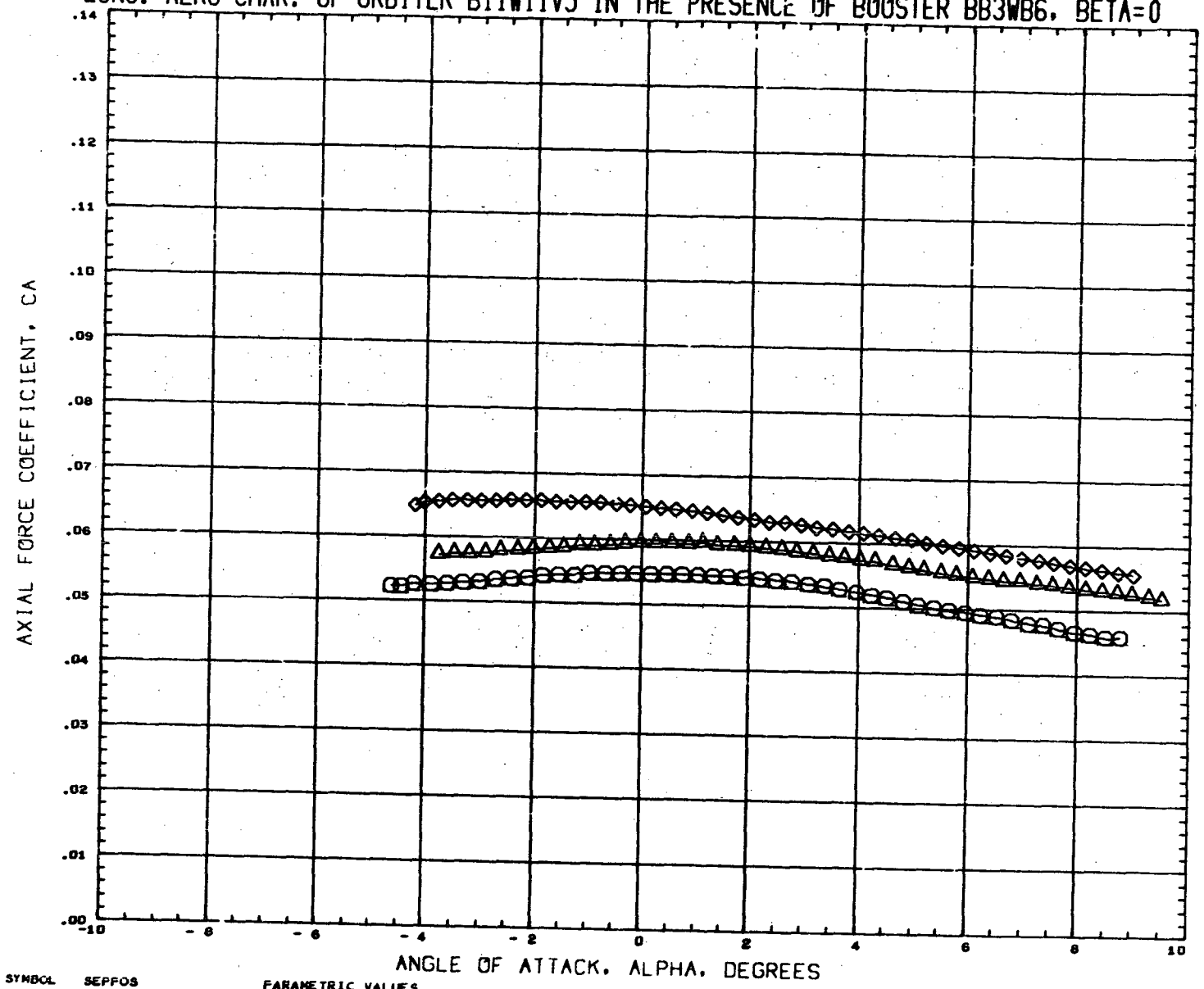
BETA	- 0.021	MACH		1.100
ALPB	3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

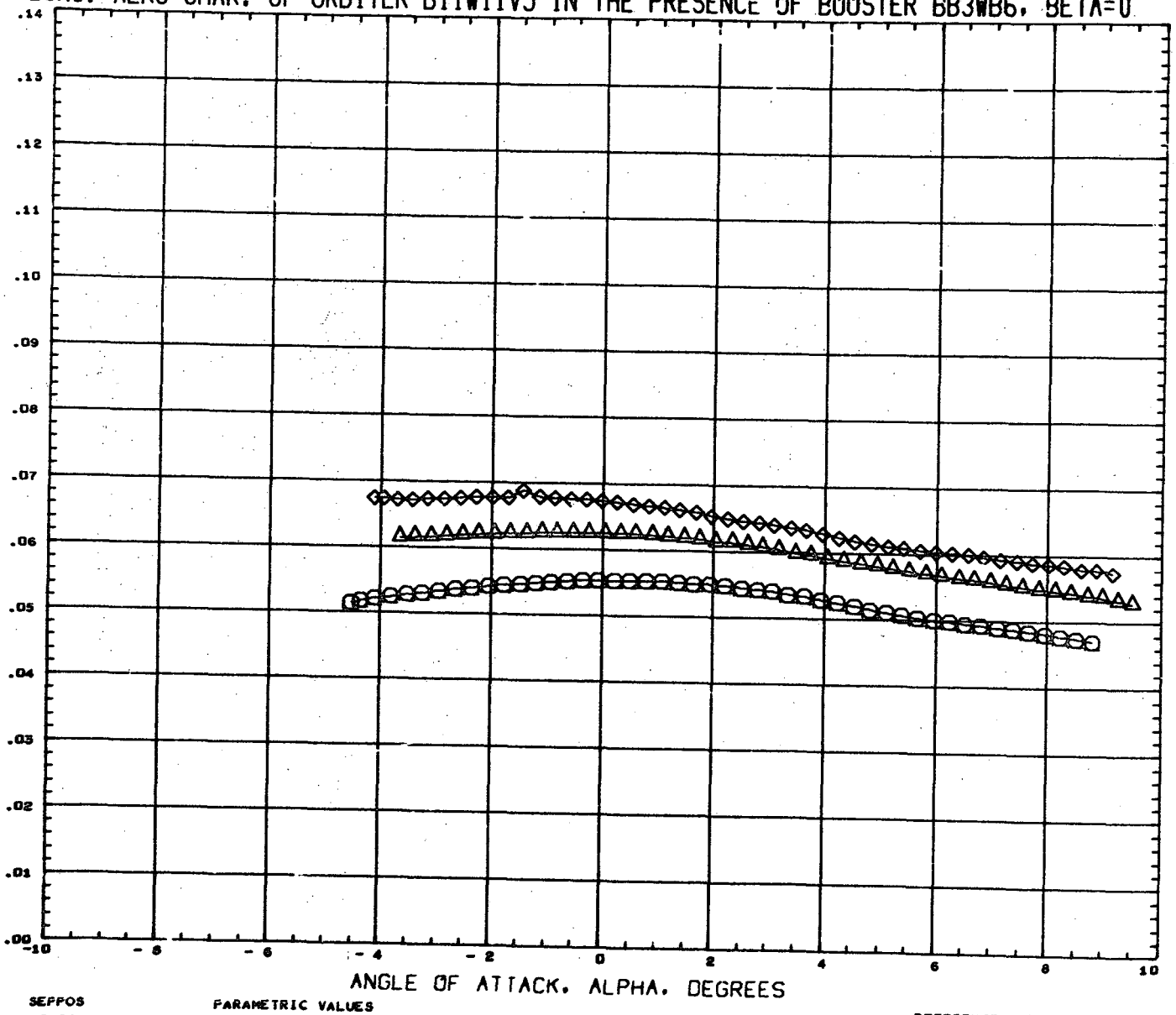
BETA	- 0.021	MACH	1.100
ALFB	3.901	BETB	- 0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

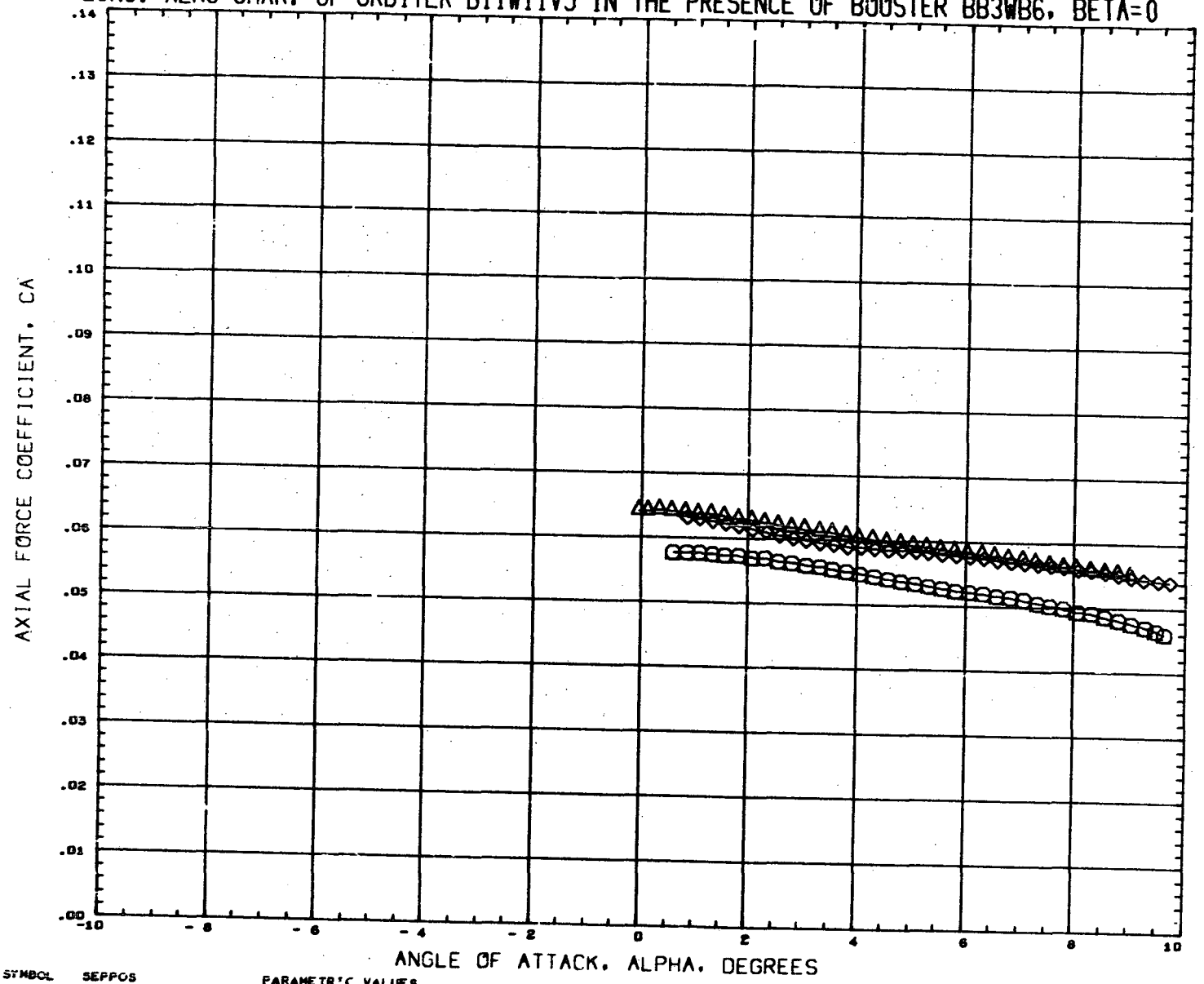
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

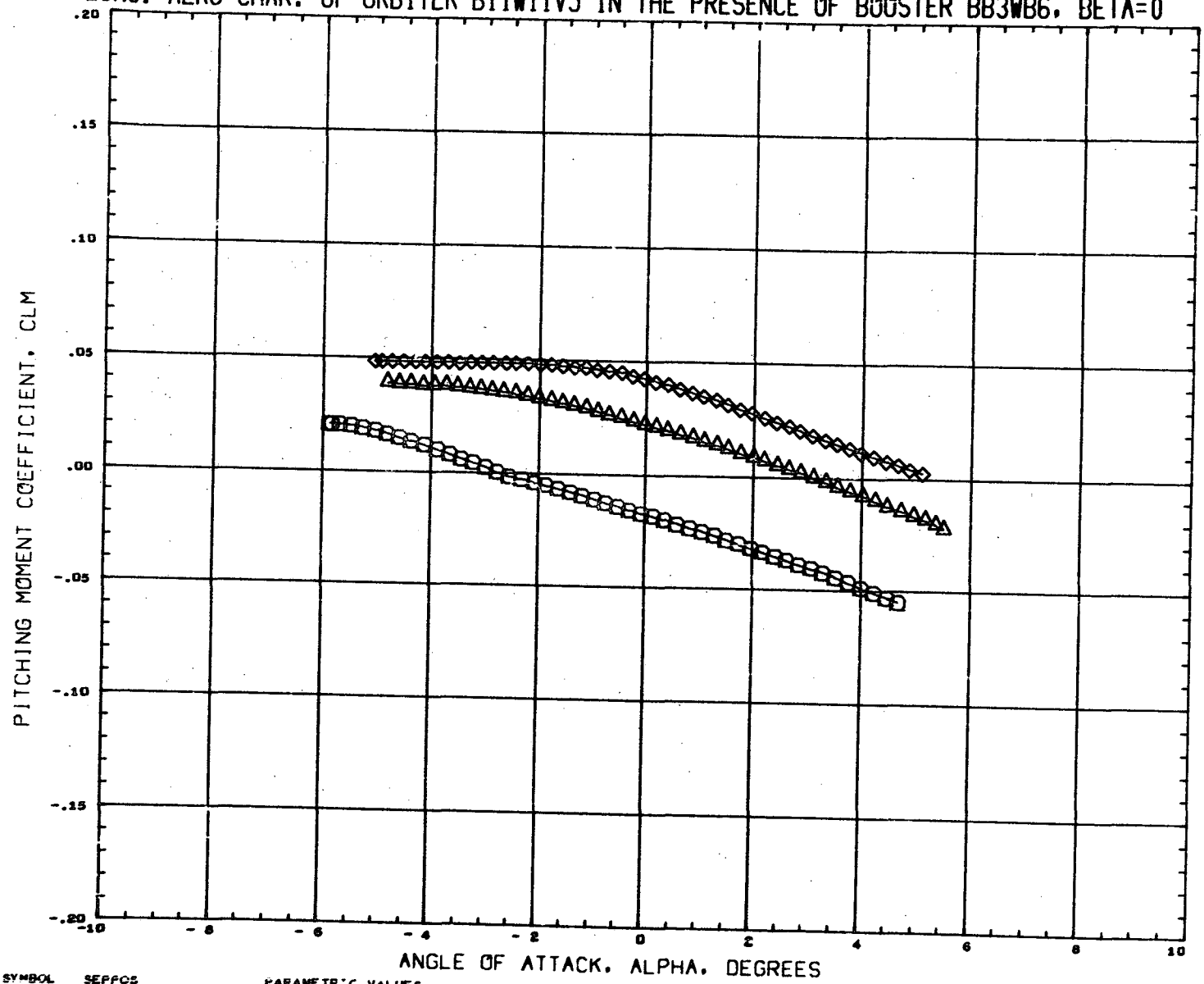
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

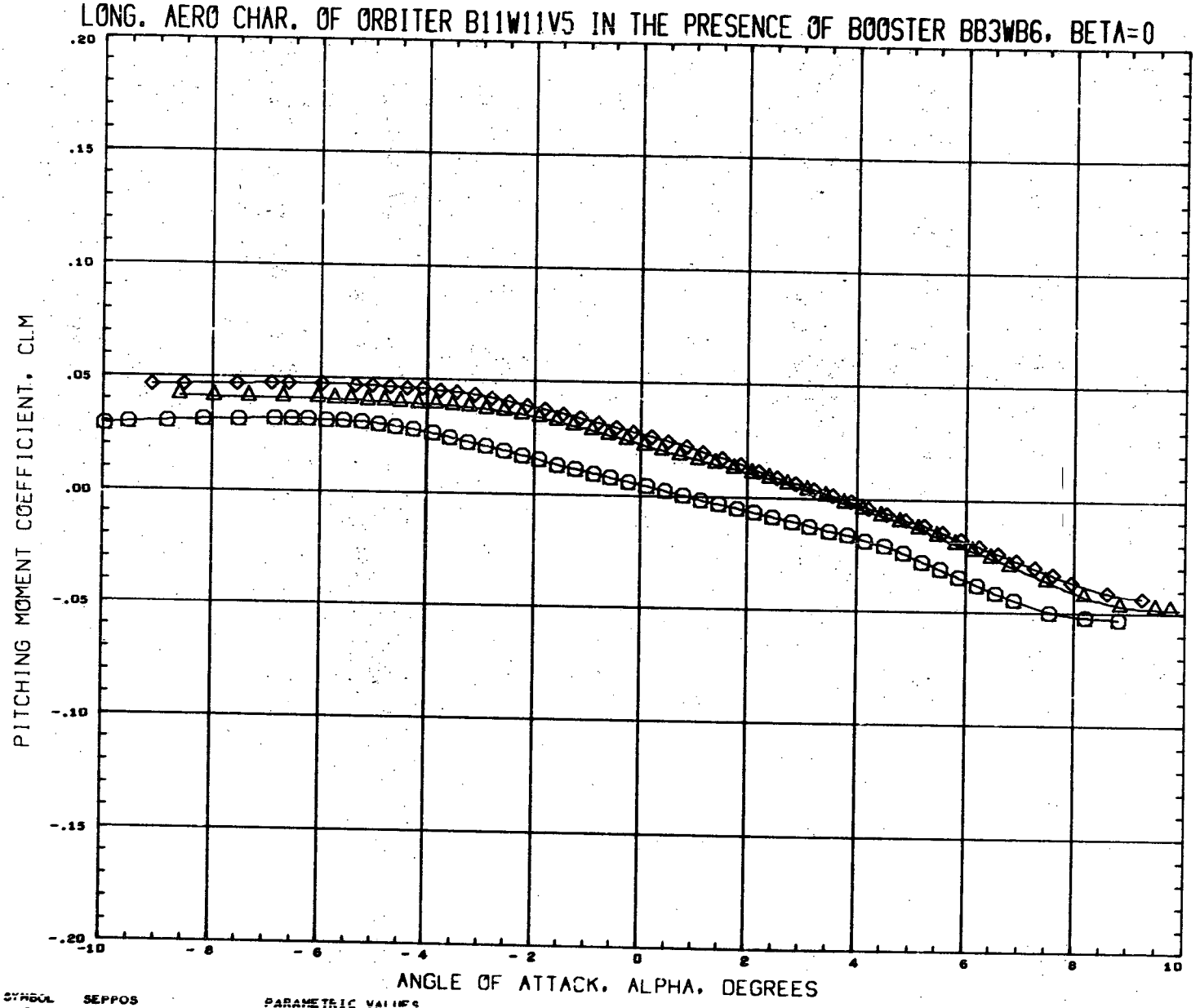
LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.001	BETA	- 0.034	MACH	1.370
△	0.002	ALPB	0.144	SETB	- 0.012
◇	0.003				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

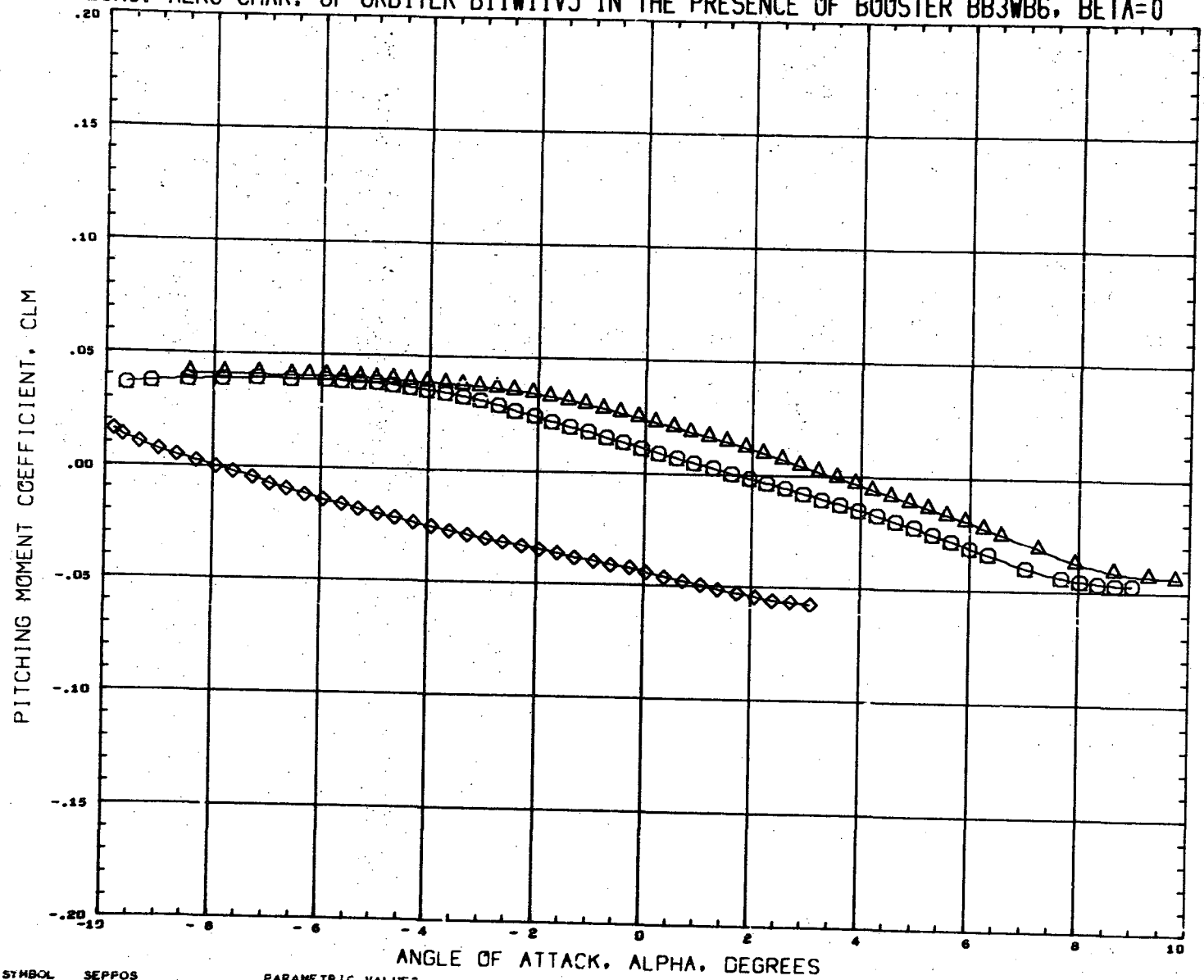
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.6820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

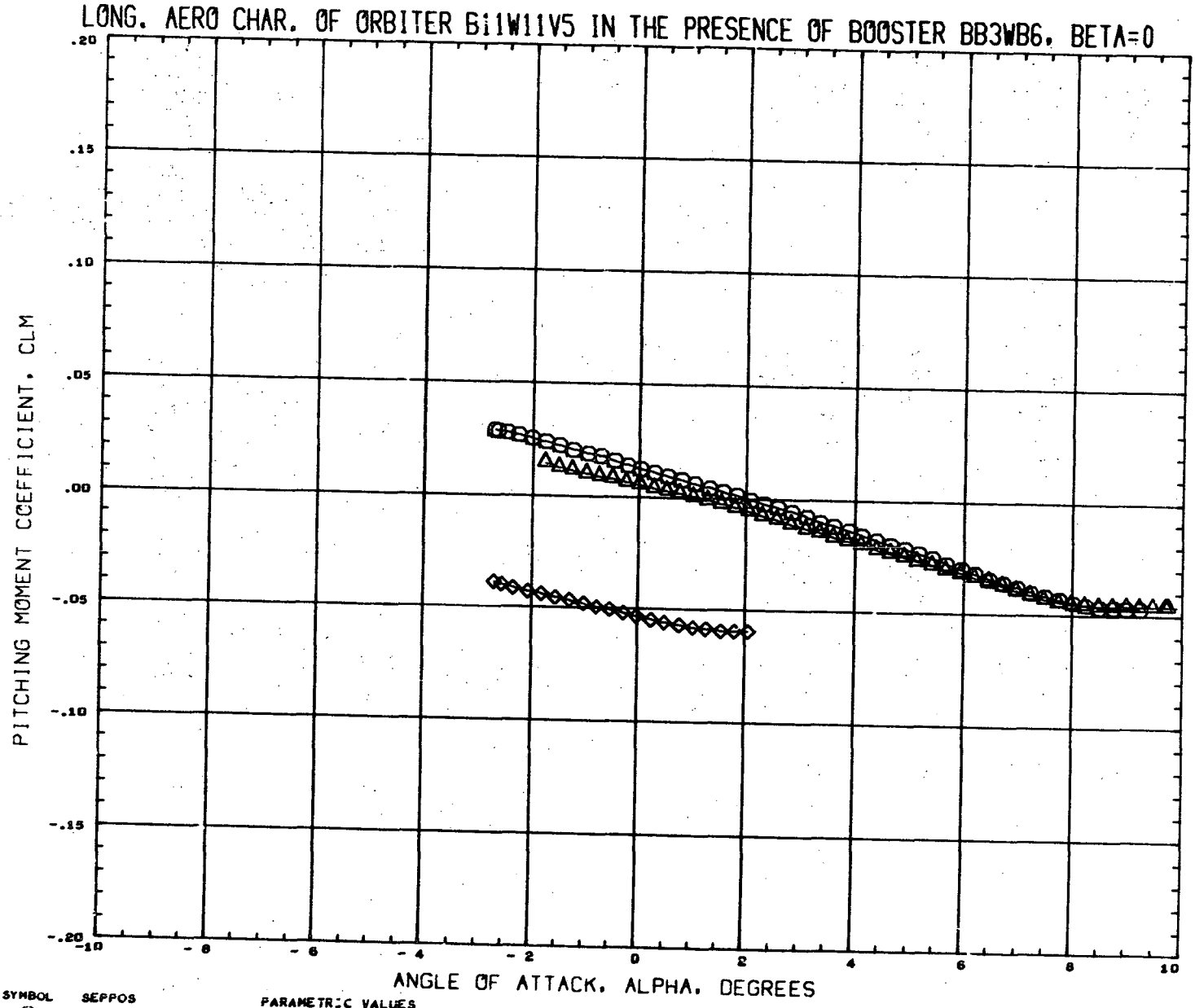
PARAMETRIC VALUES

BETA	-	0.034	MACH	1.370
ALPB		0.144	BETB	- 0.012

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3800	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000



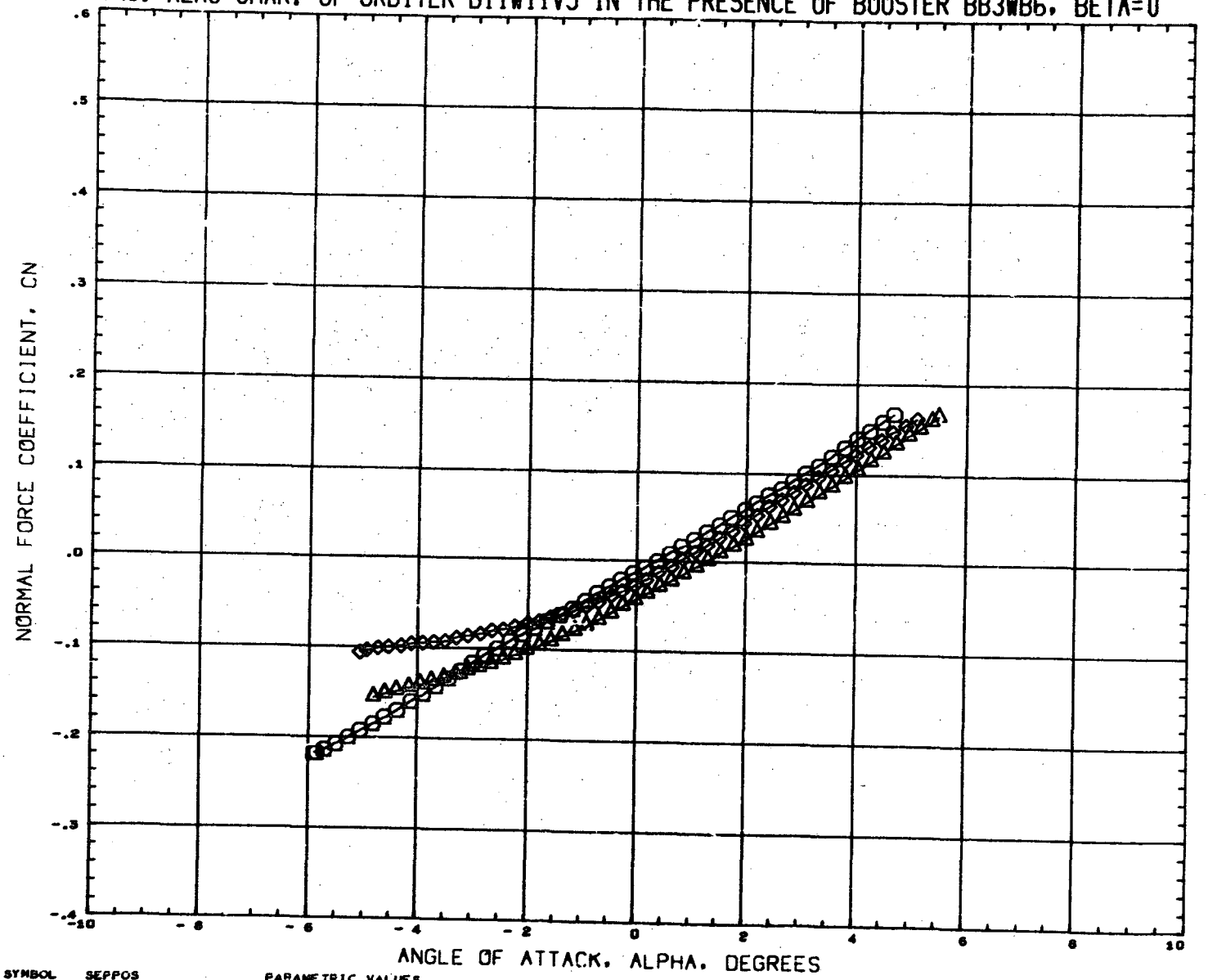
SYMBOL	SEPPOS	PARAMETRIC VALUES					
△○	0.010	BETA	- 0.034	MACH	1.370		
	0.011	ALPB	0.144	SETB	- 0.012		
◇	0.012						

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0

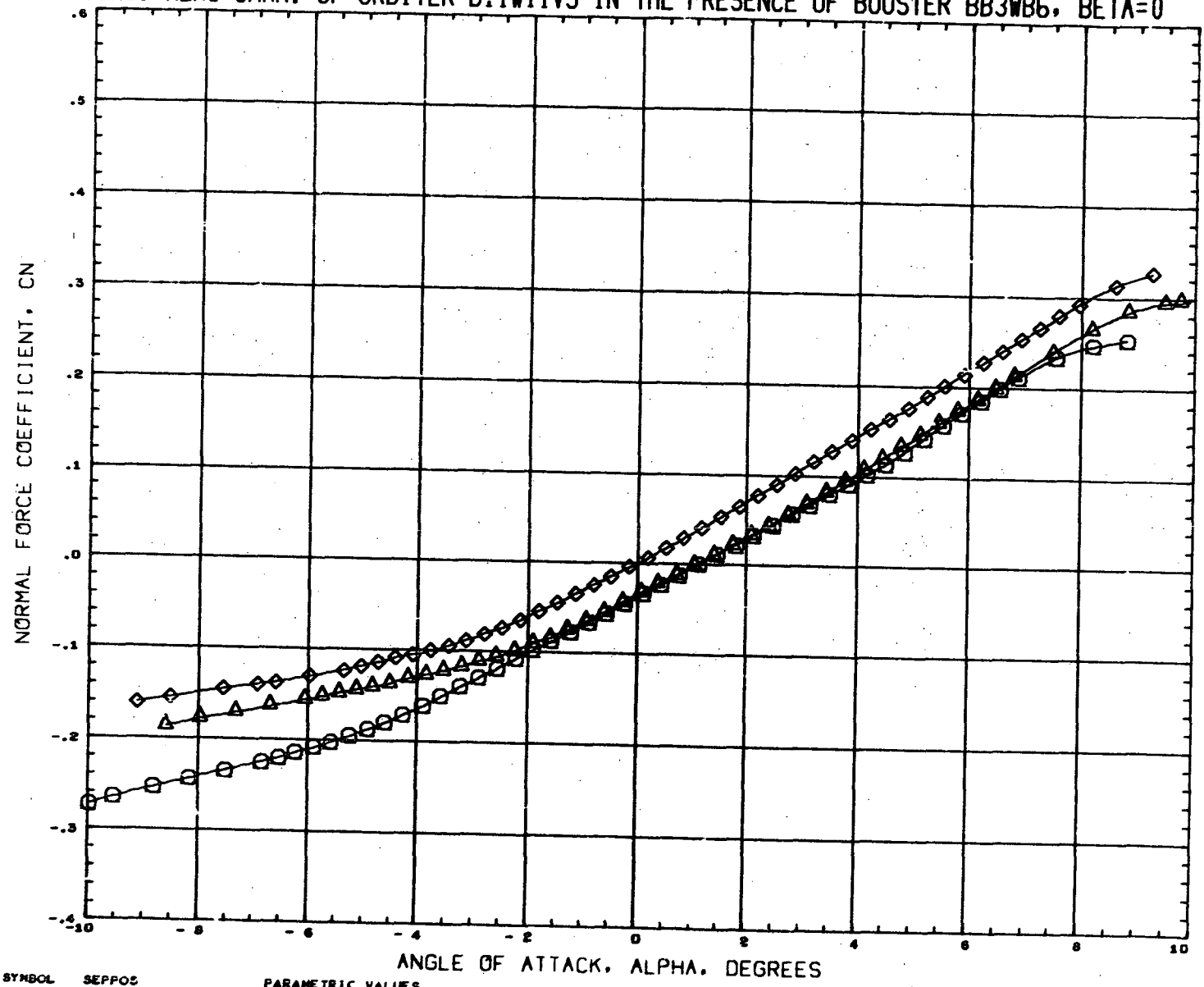


SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.034	MACH	1.370	
△	0.002	ALPB	0.144	BETB	- 0.012	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

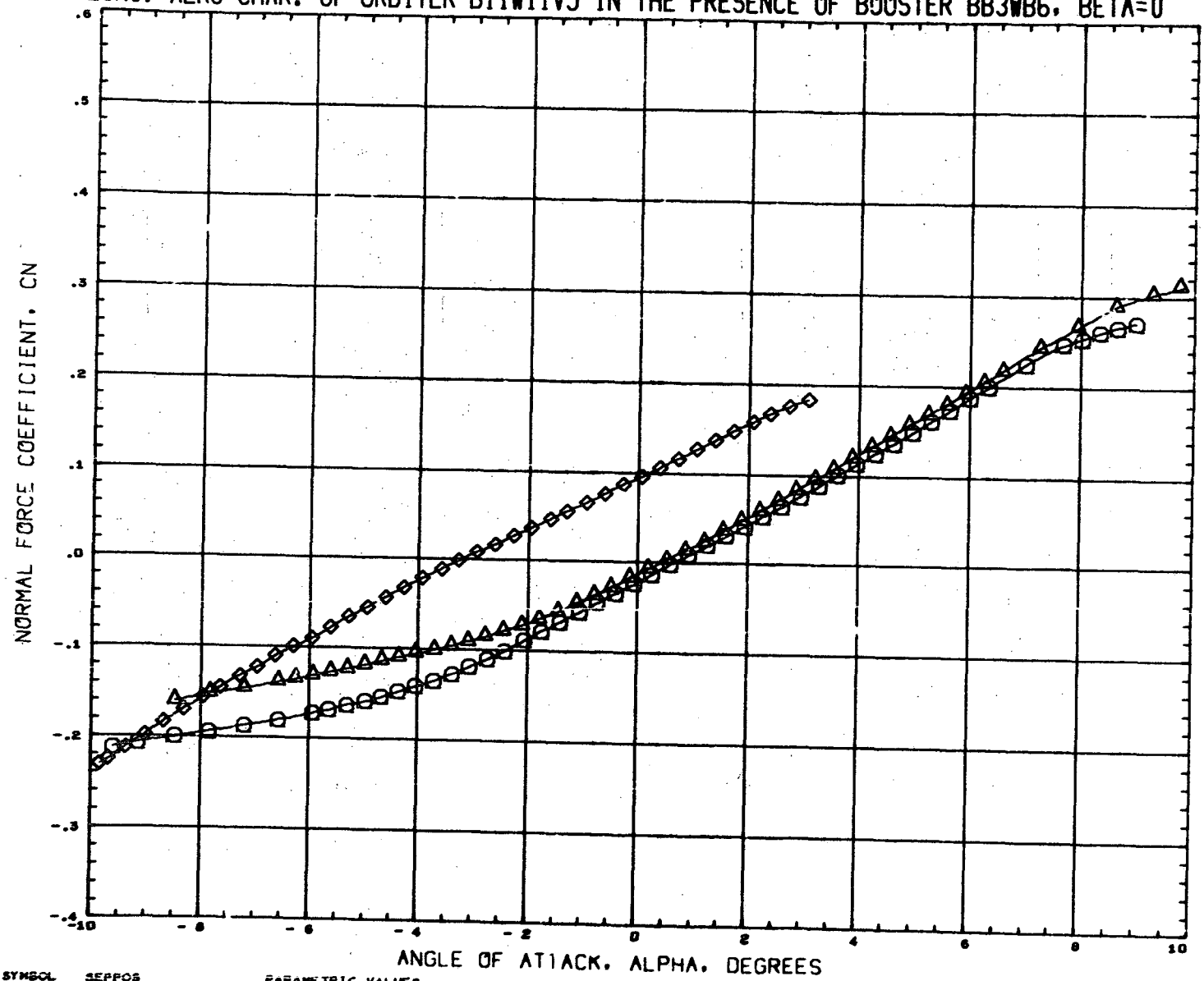
BETA	-	0.034	MACH		1.370
ALFB		0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

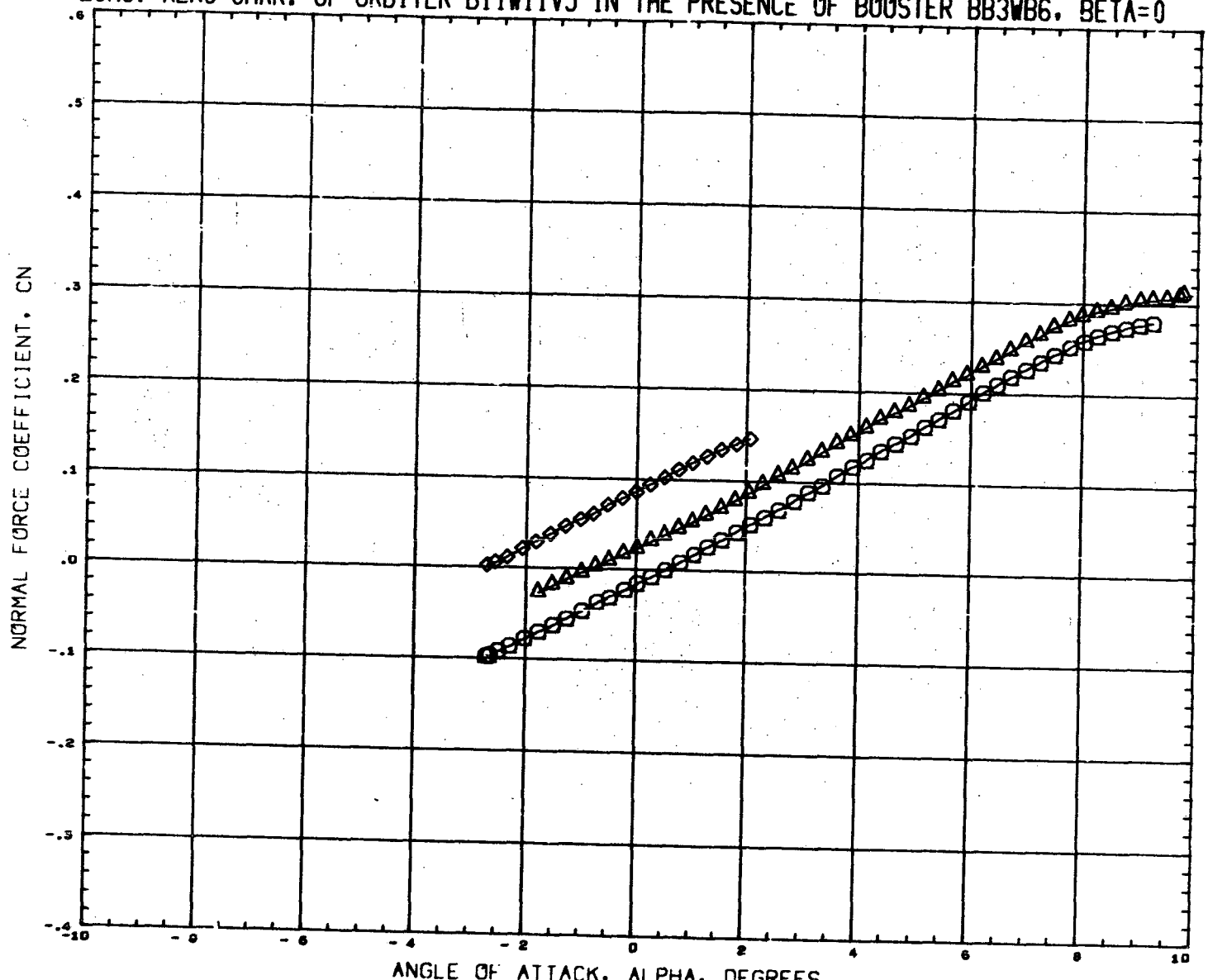
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

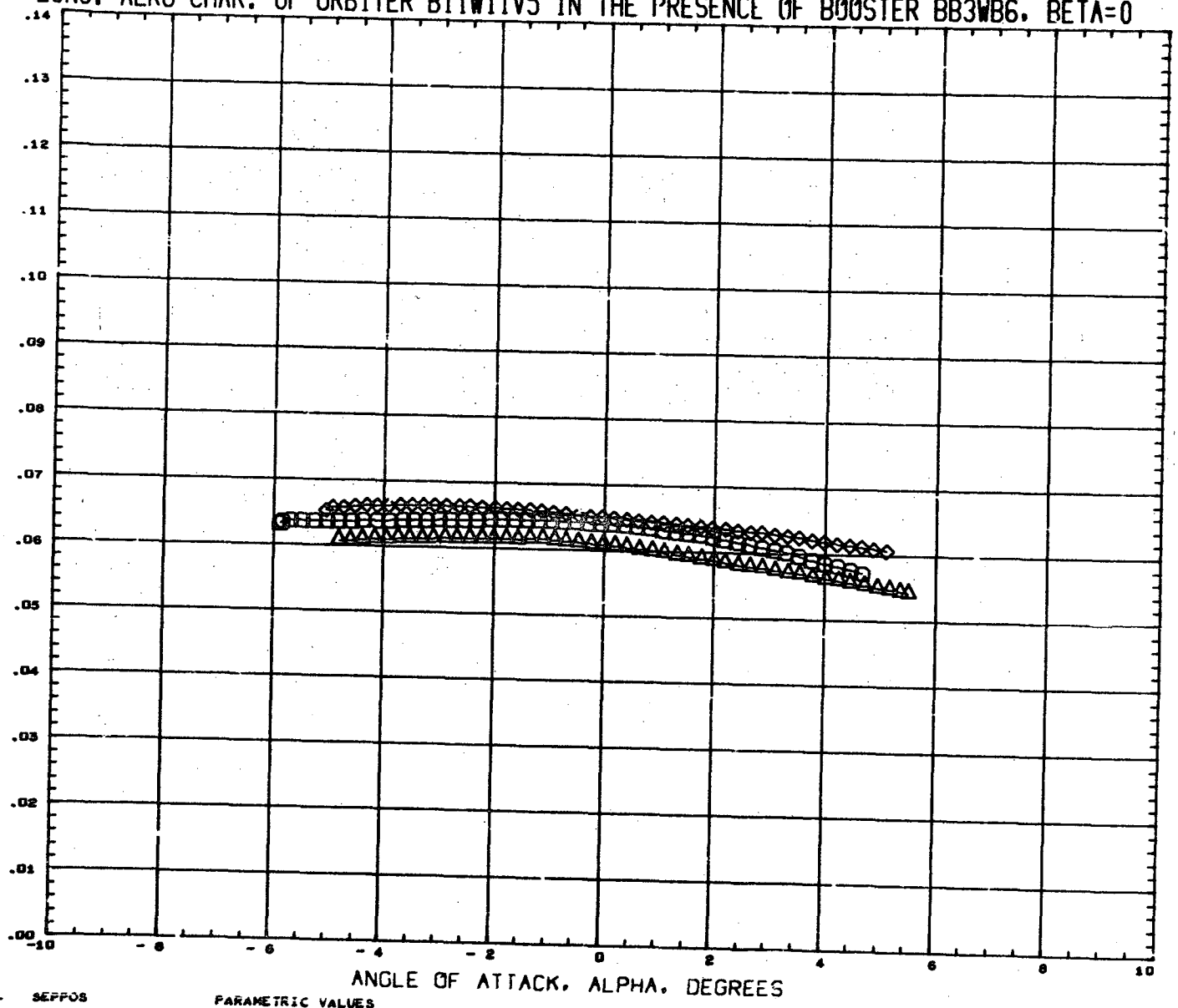
BETA	- 0.034	MACH		1.370
ALFB	0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8020	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



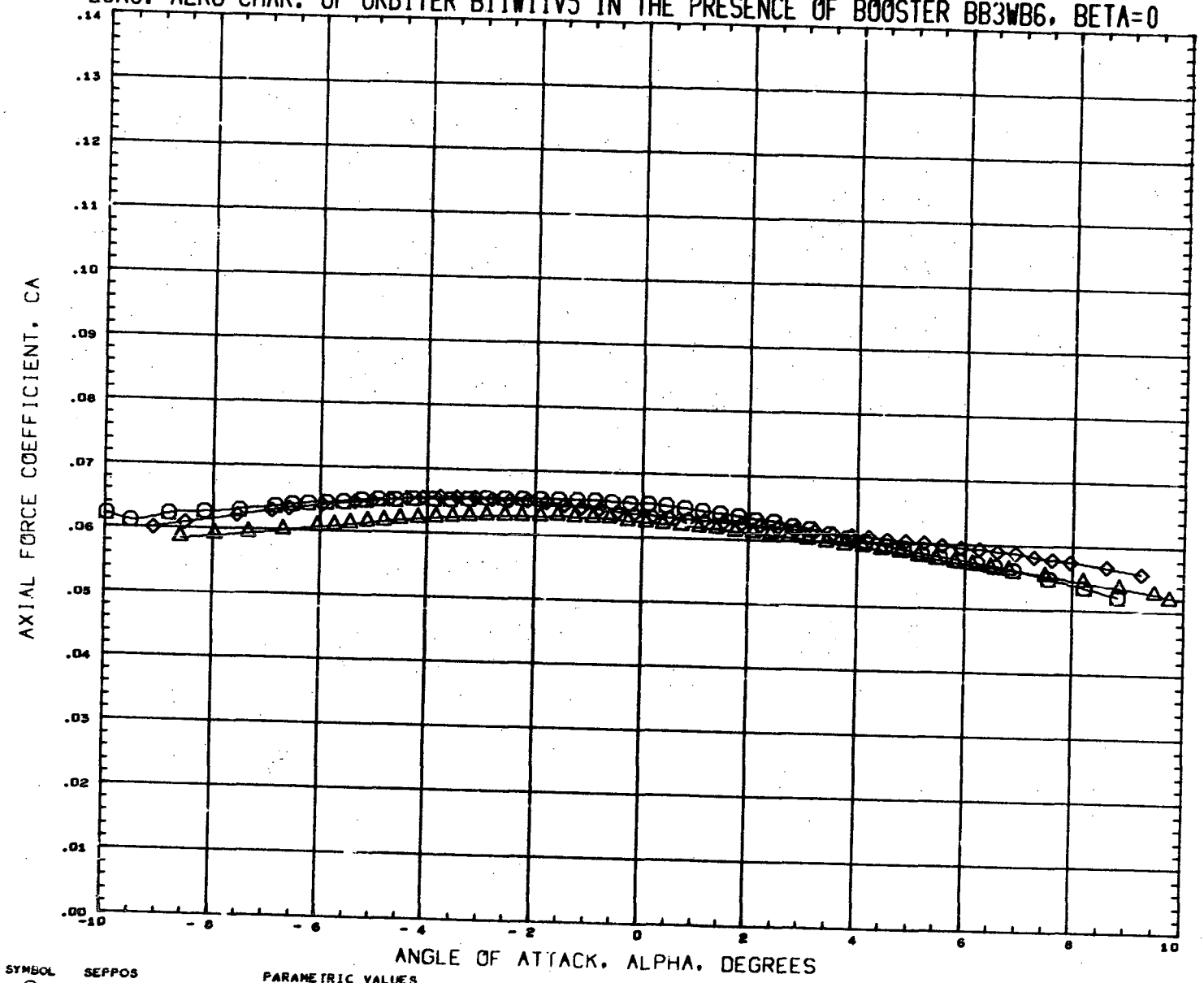
SYMBOL	SEFFOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.034	MACH	1.370	
△	0.002	ALPB	0.144	BETB	- 0.012	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

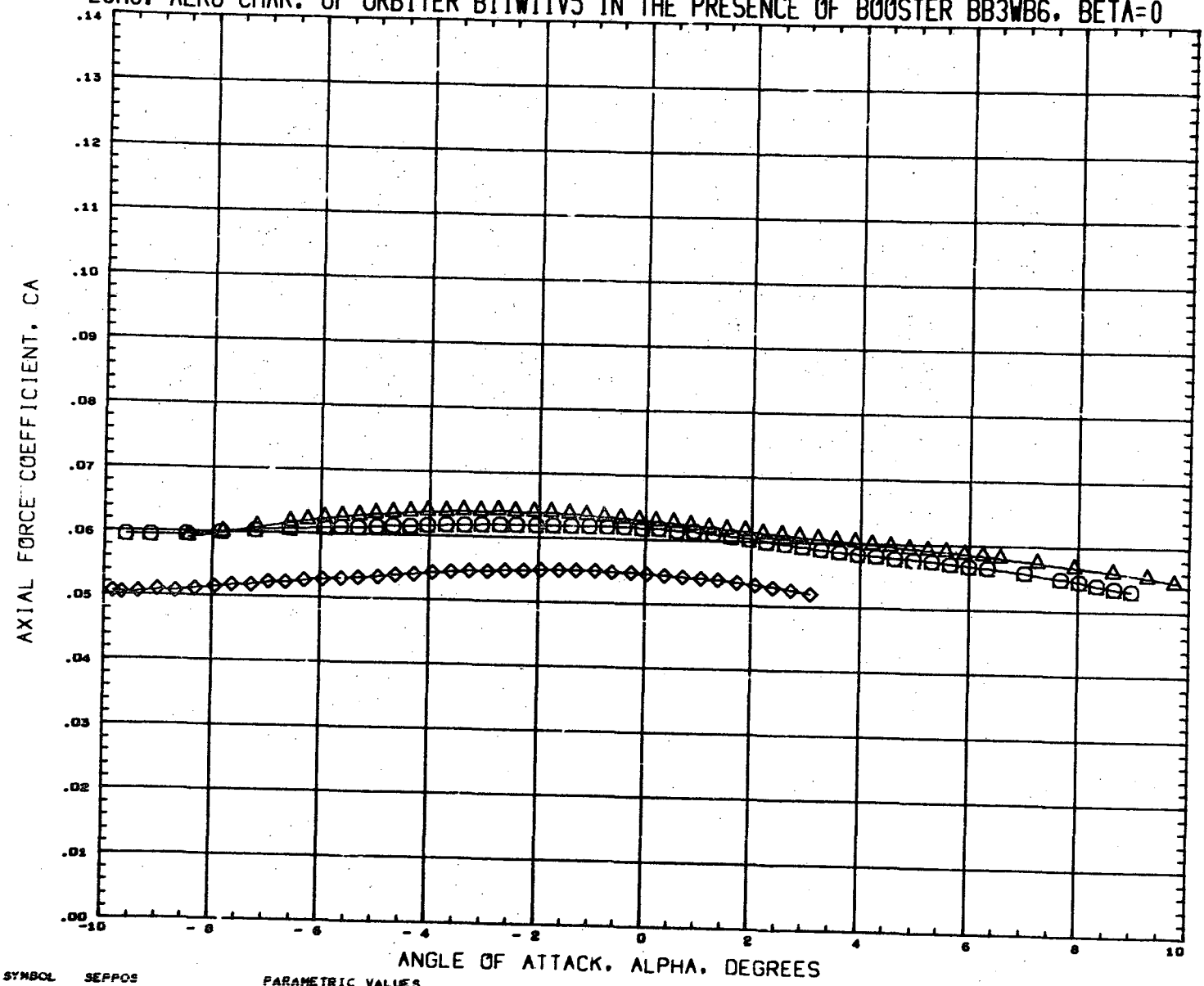
BETA	- 0.034	MACH		1.370
ALPB	0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

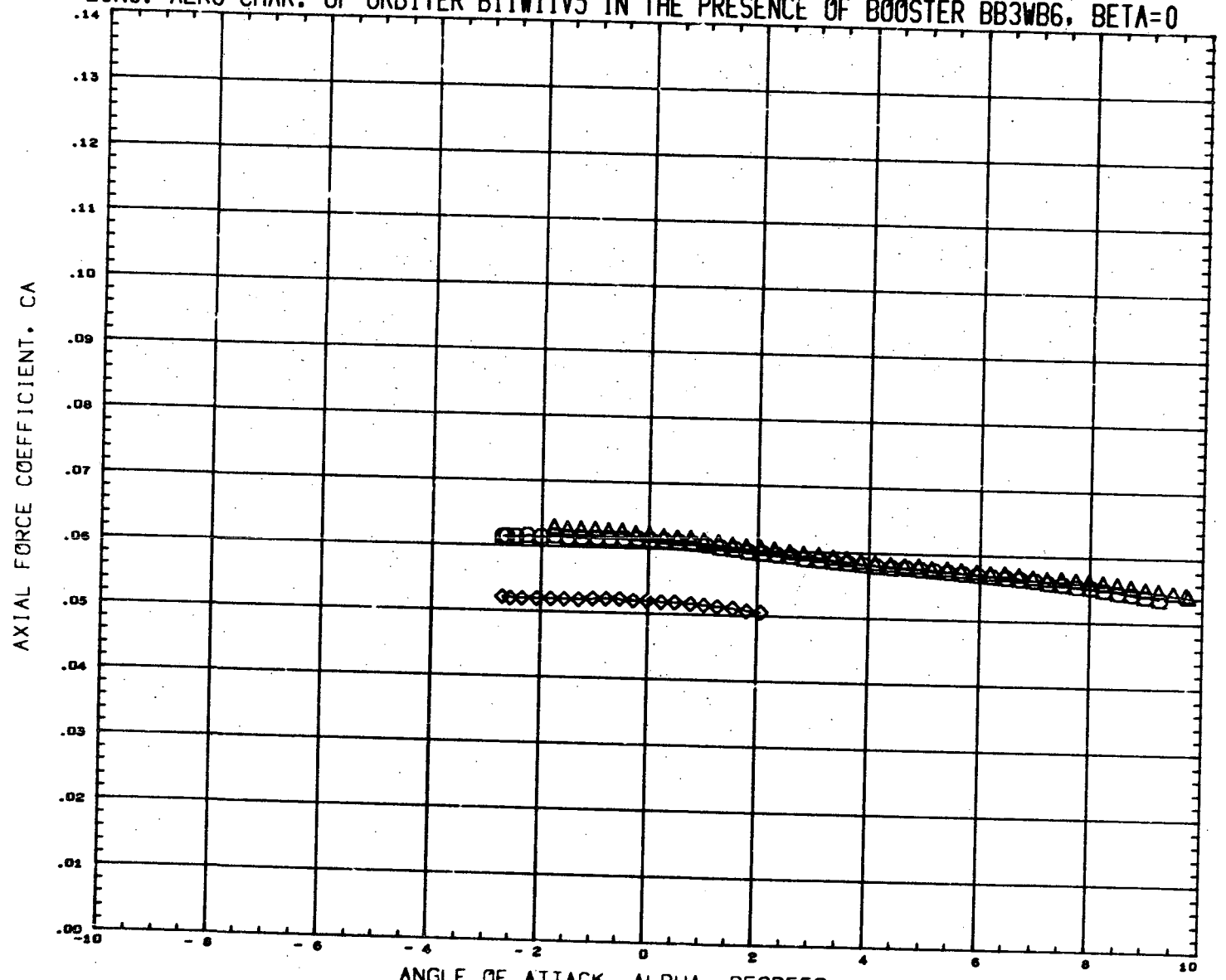
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



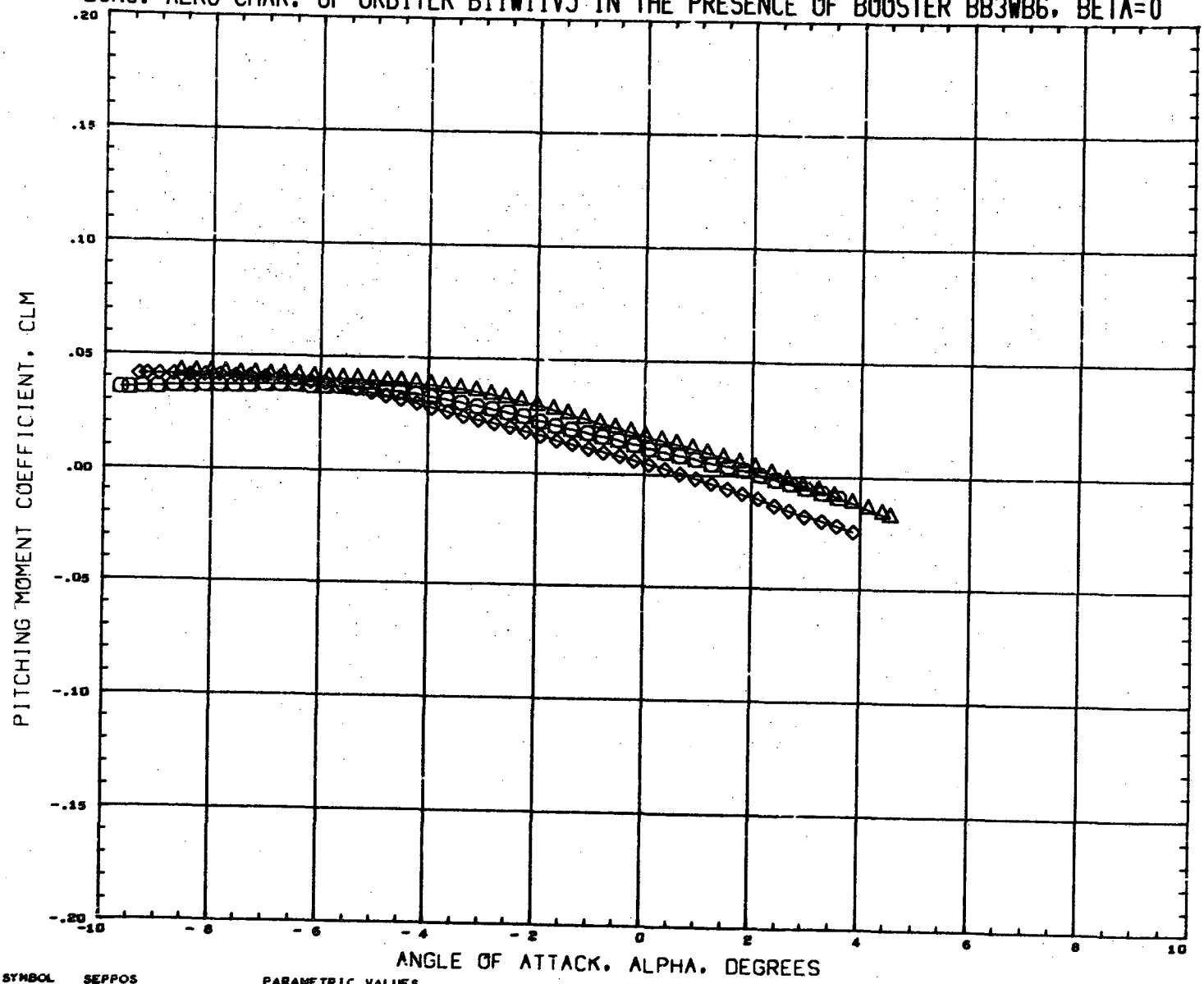
SYMBOL	SEPPOS	PARAMETRIC VALUES			
△	0.010	BETA	- 0.034	MACH	1.370
○	0.011	ALPB	0.144	BETB	- 0.012
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU028) 21 JUN 71 PAGE 102

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

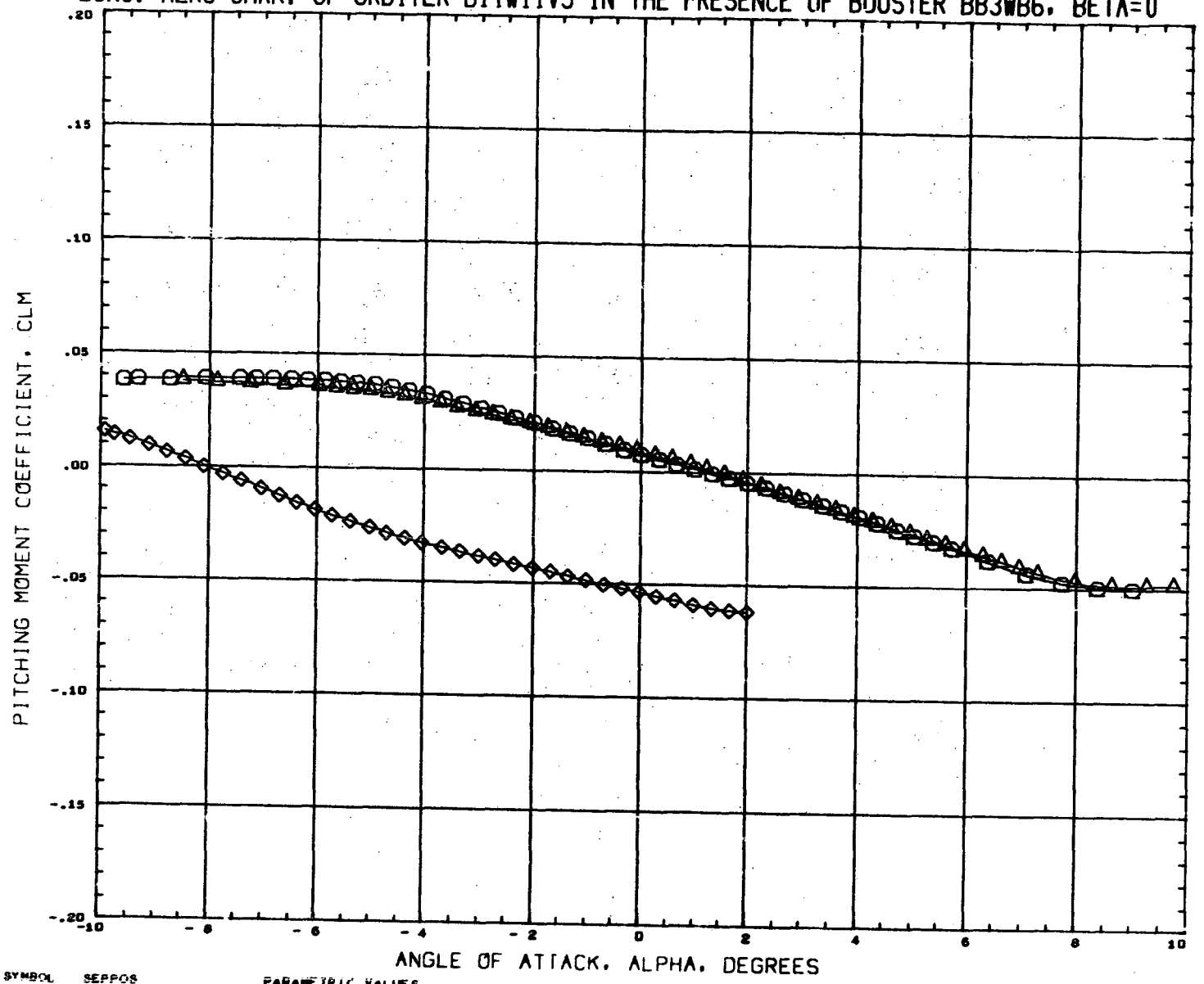
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.006
◇	0.005

PARAMETRIC VALUES

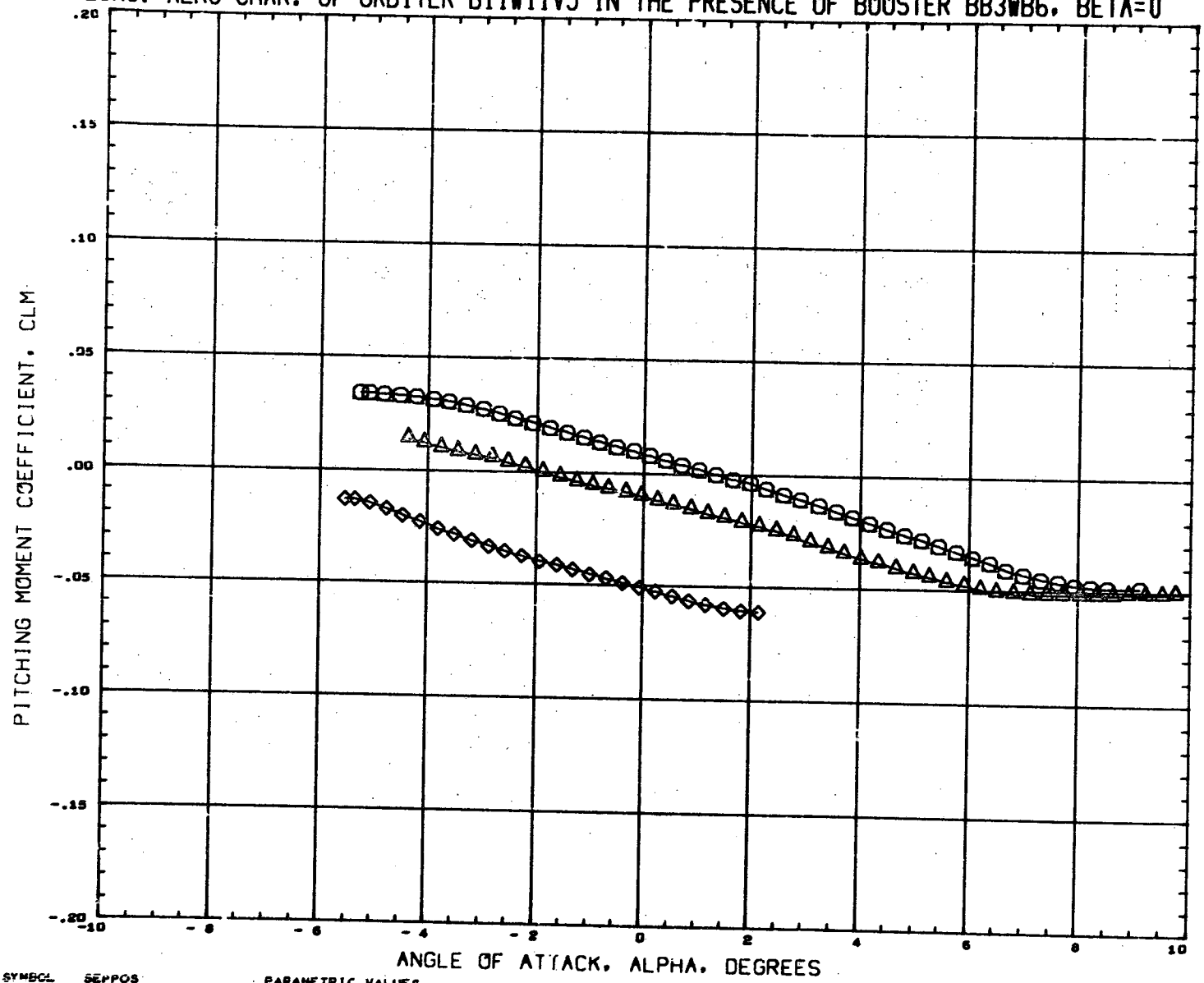
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
△	0.010
◇	0.011
○	0.012

PARAMETRIC VALUES

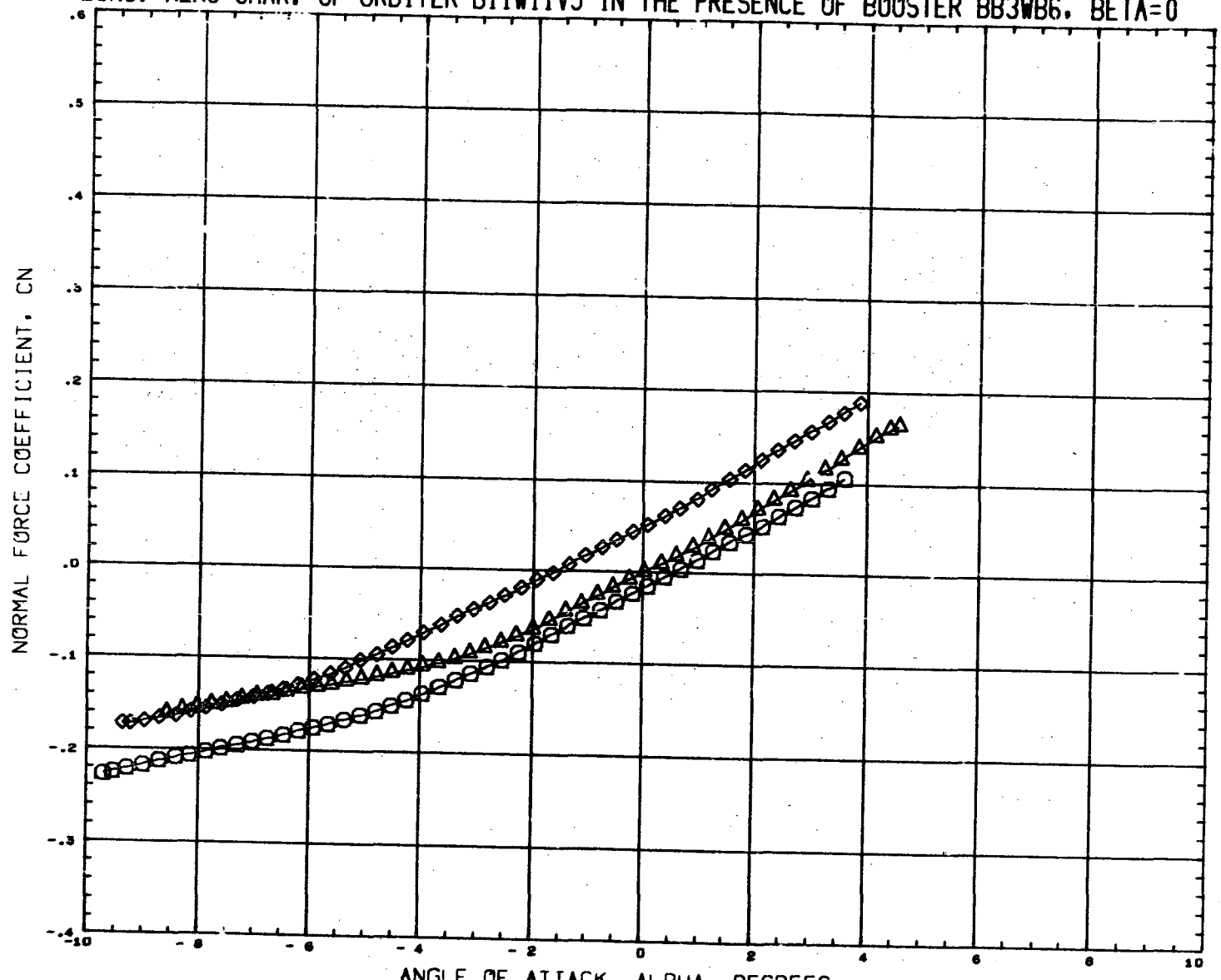
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEFFCS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

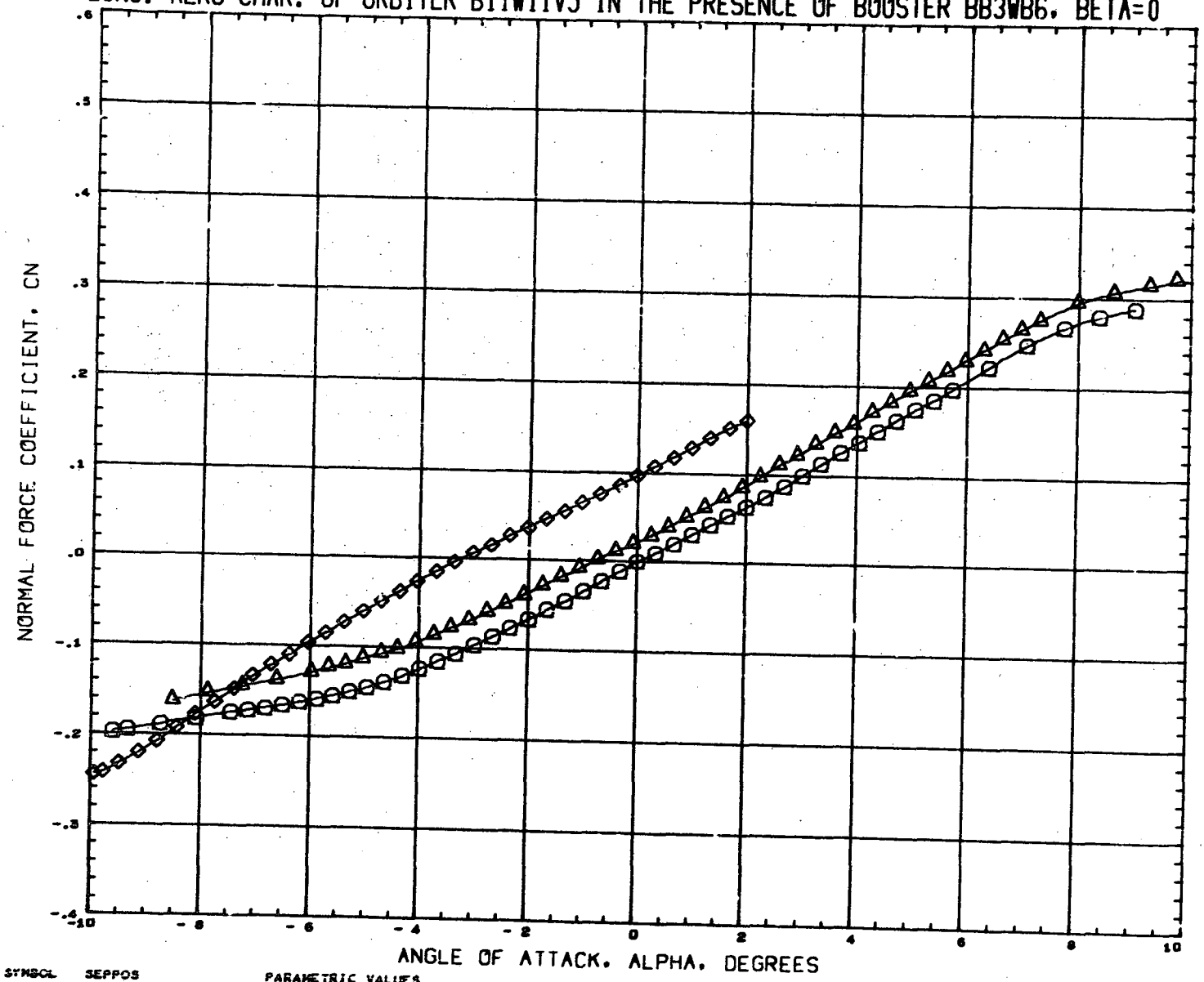
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LØNG. AERØ CHAR. ØF ØRBITER B11W11V5 IN THE PRESENCE ØF BØØSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

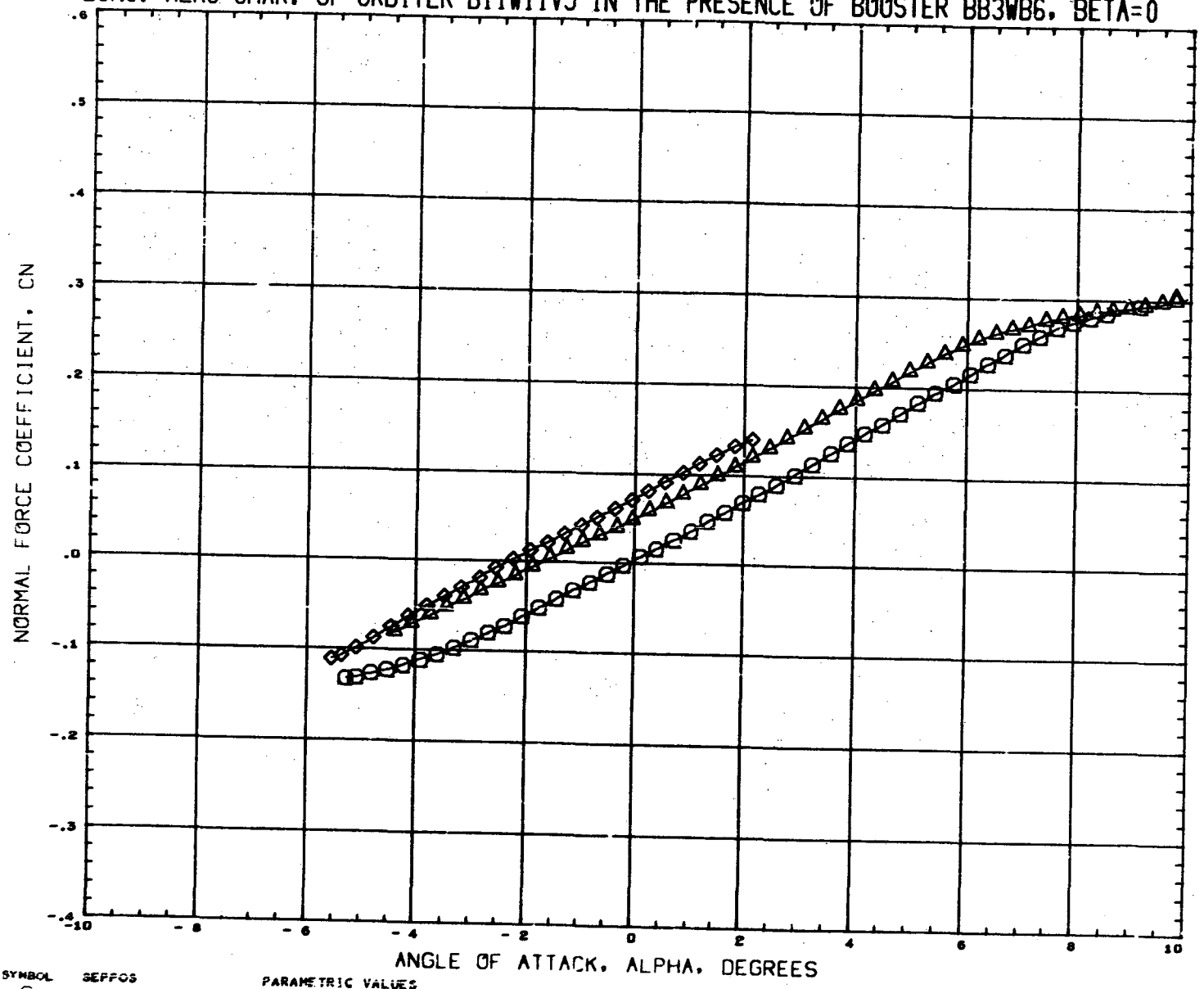
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	IN

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEFFOS
△	0.010
○	0.011
◇	0.012

PARAMETRIC VALUES

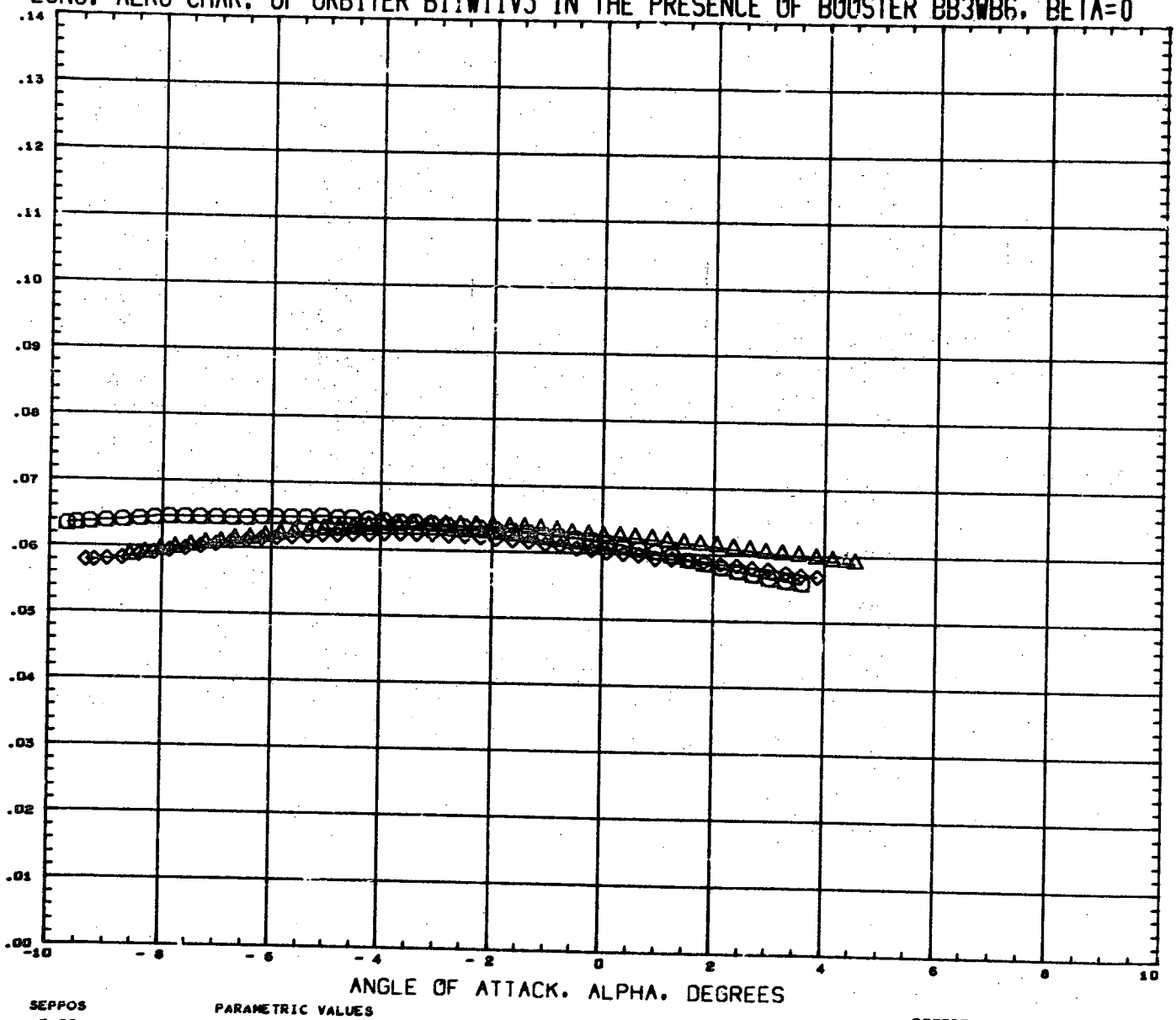
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

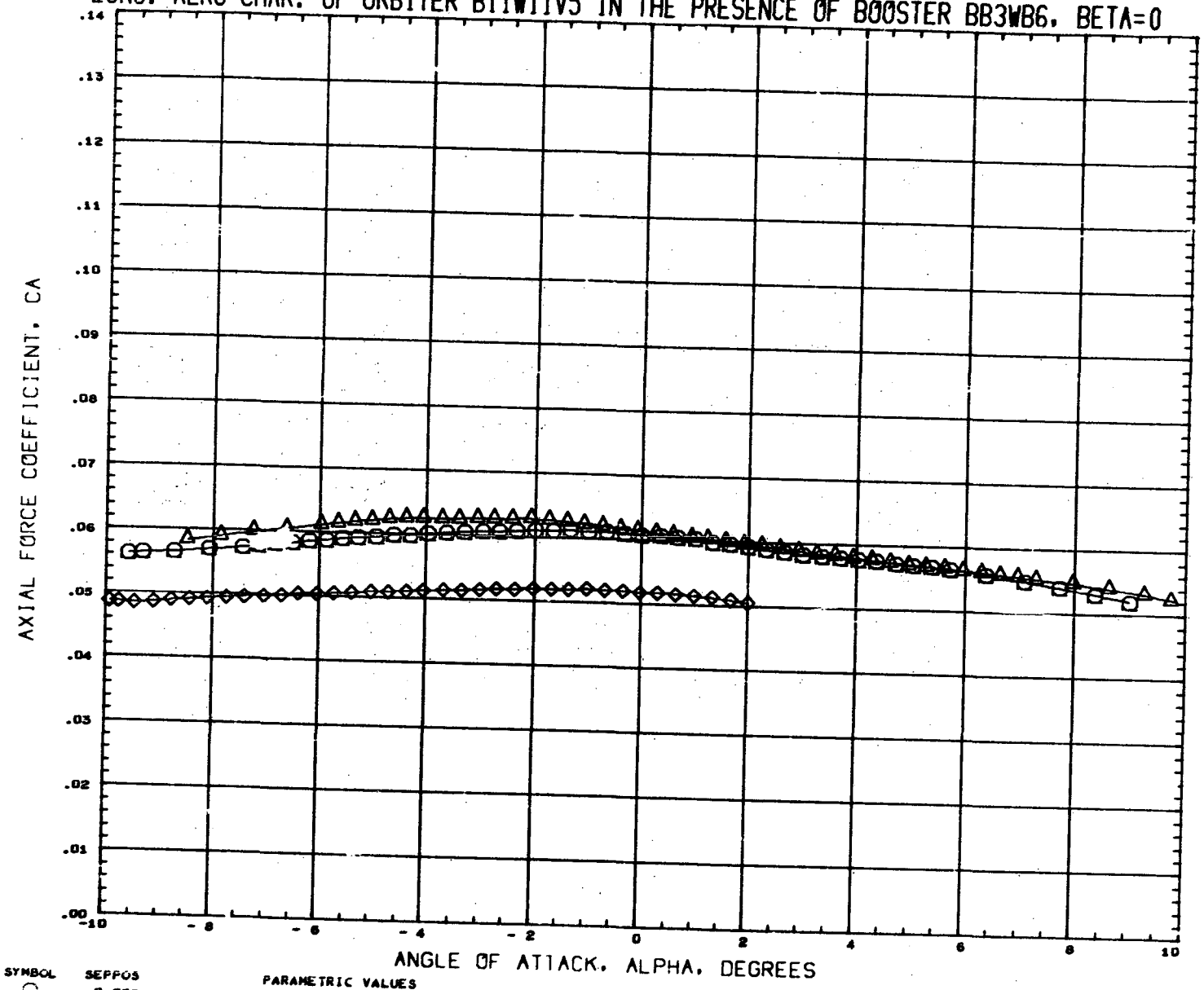
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8620	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0066	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.007	BETA	- 0.040	MACH	1.370
△	0.008	ALPB	- 5.340	BETB	- 0.013
◇	0.009				

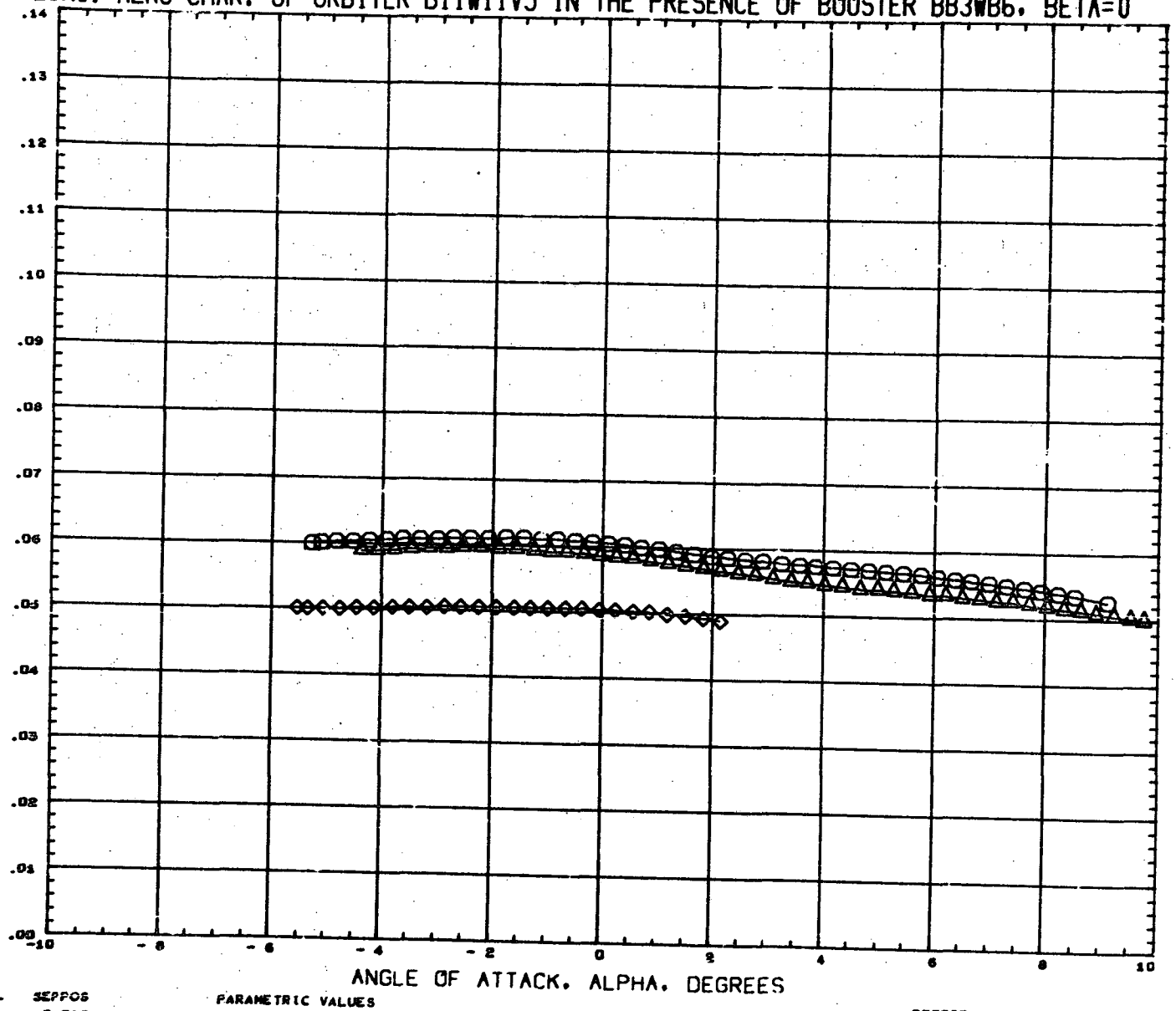
REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU027) 21 JUN 71 PAGE 110

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

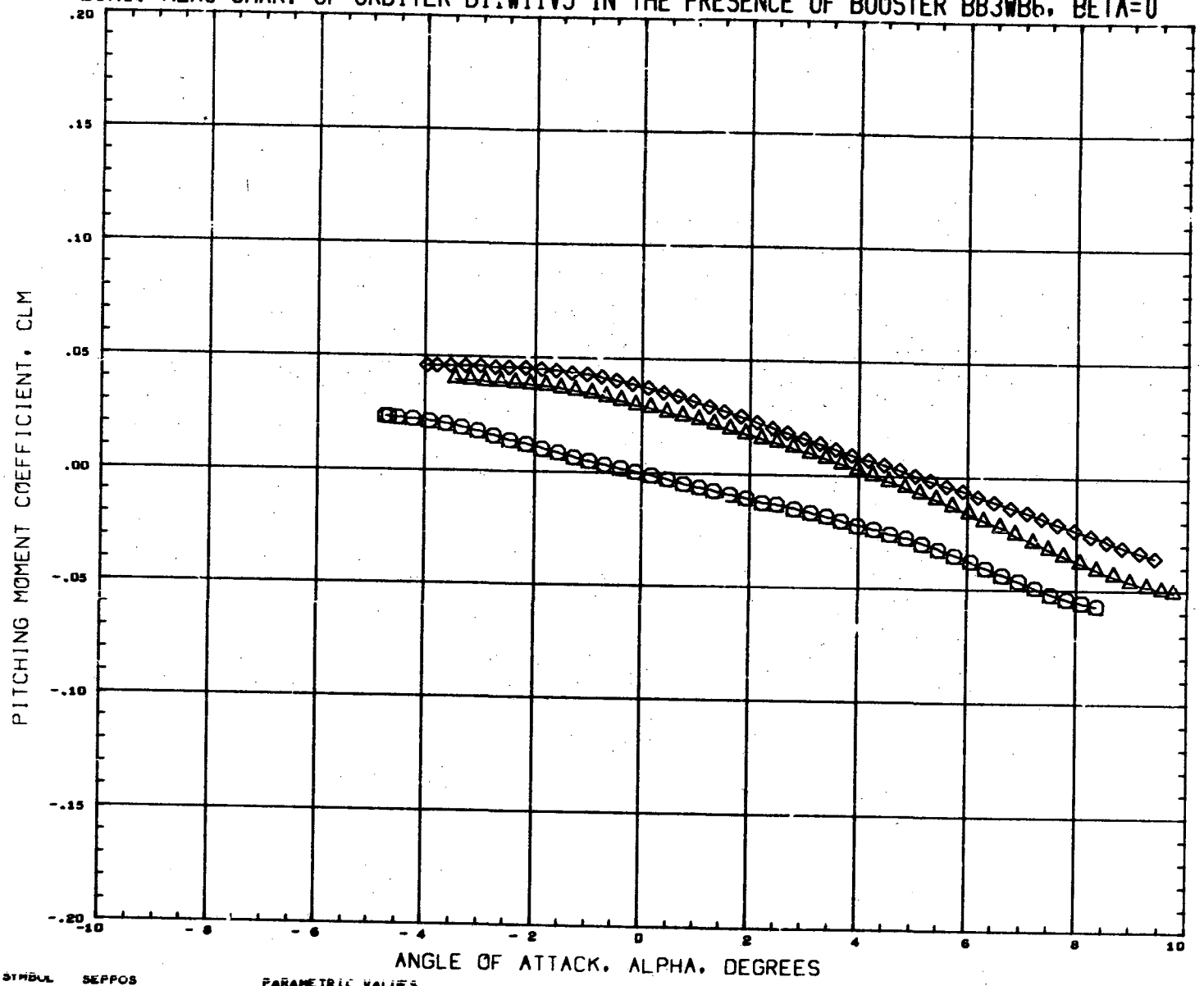
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.6820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

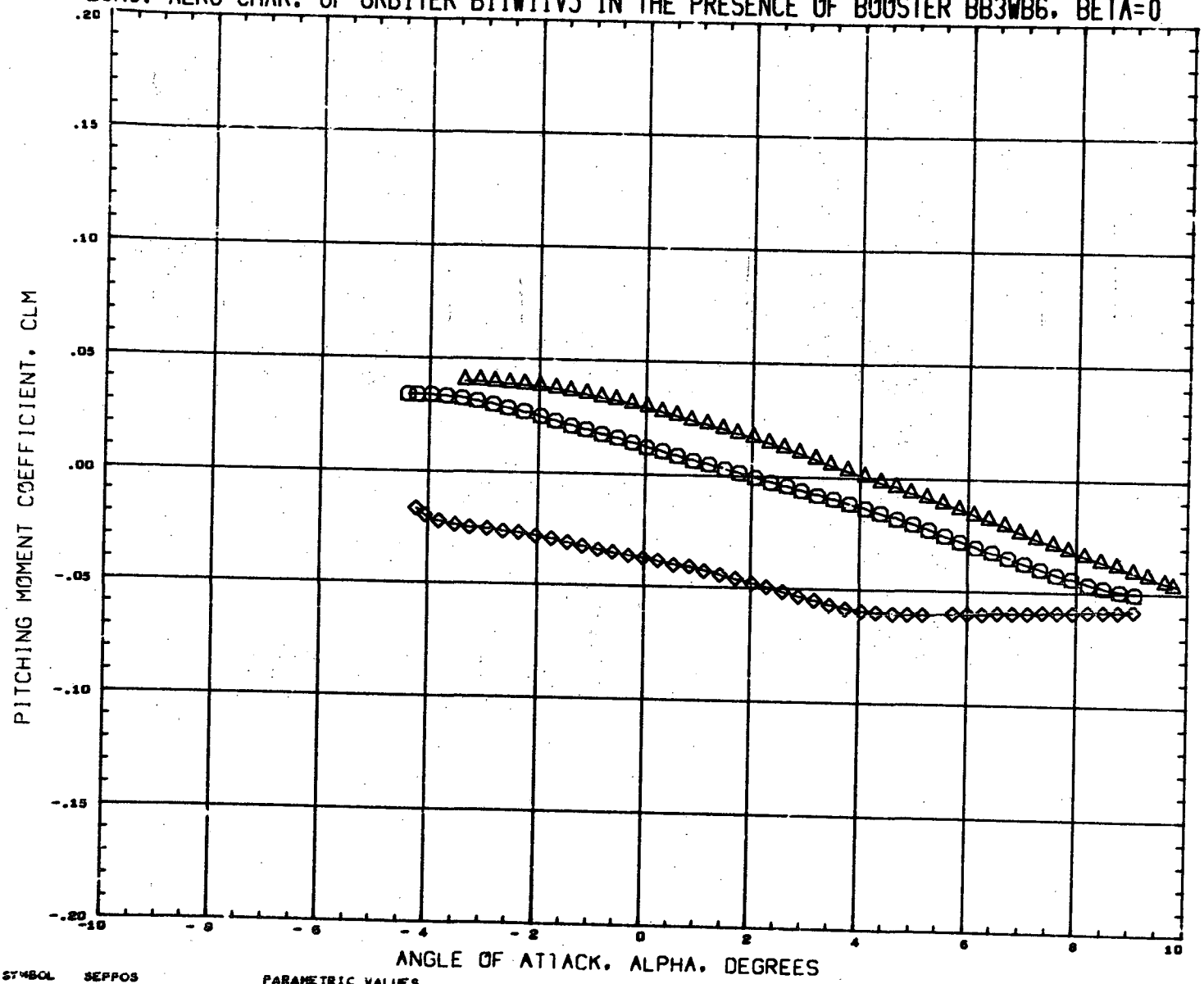
BETA	- 0.054	MACH	1.370
ALPB	3.849	BETB	- 0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
△	0.007
◇	0.008
	0.009

PARAMETRIC VALUES

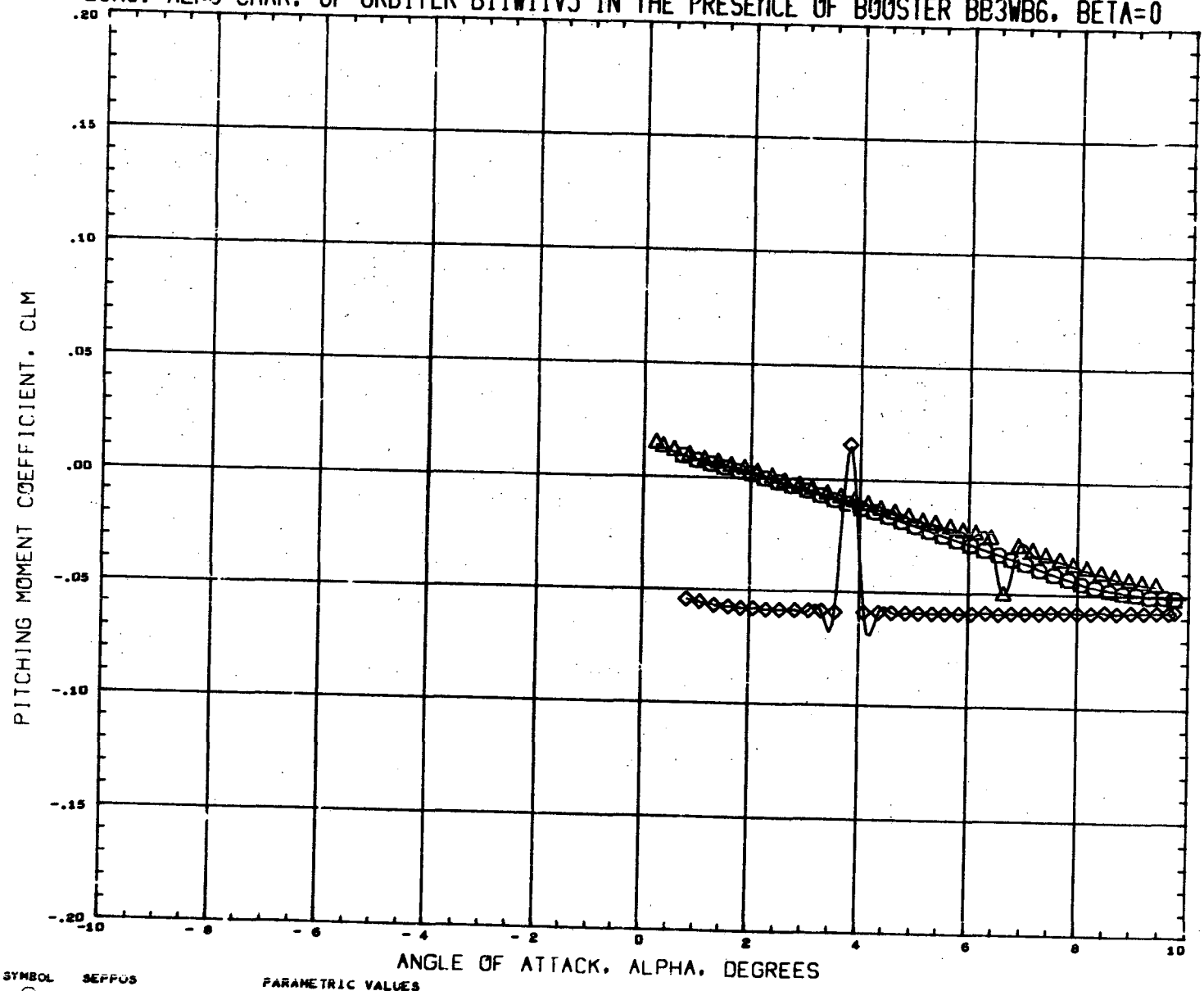
BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	6.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

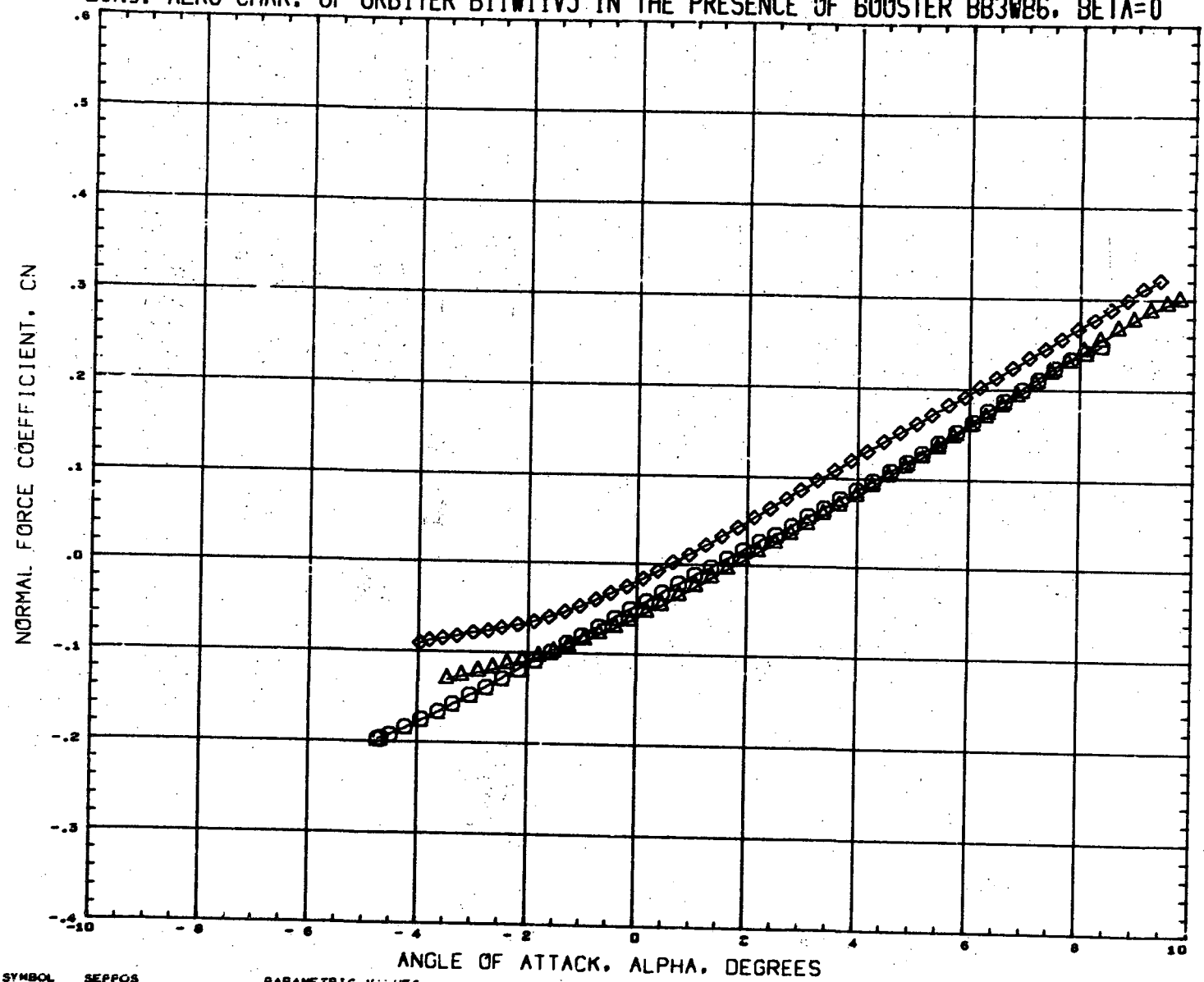
BETA	- 0.054	MACH		1.370
ALPB	3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

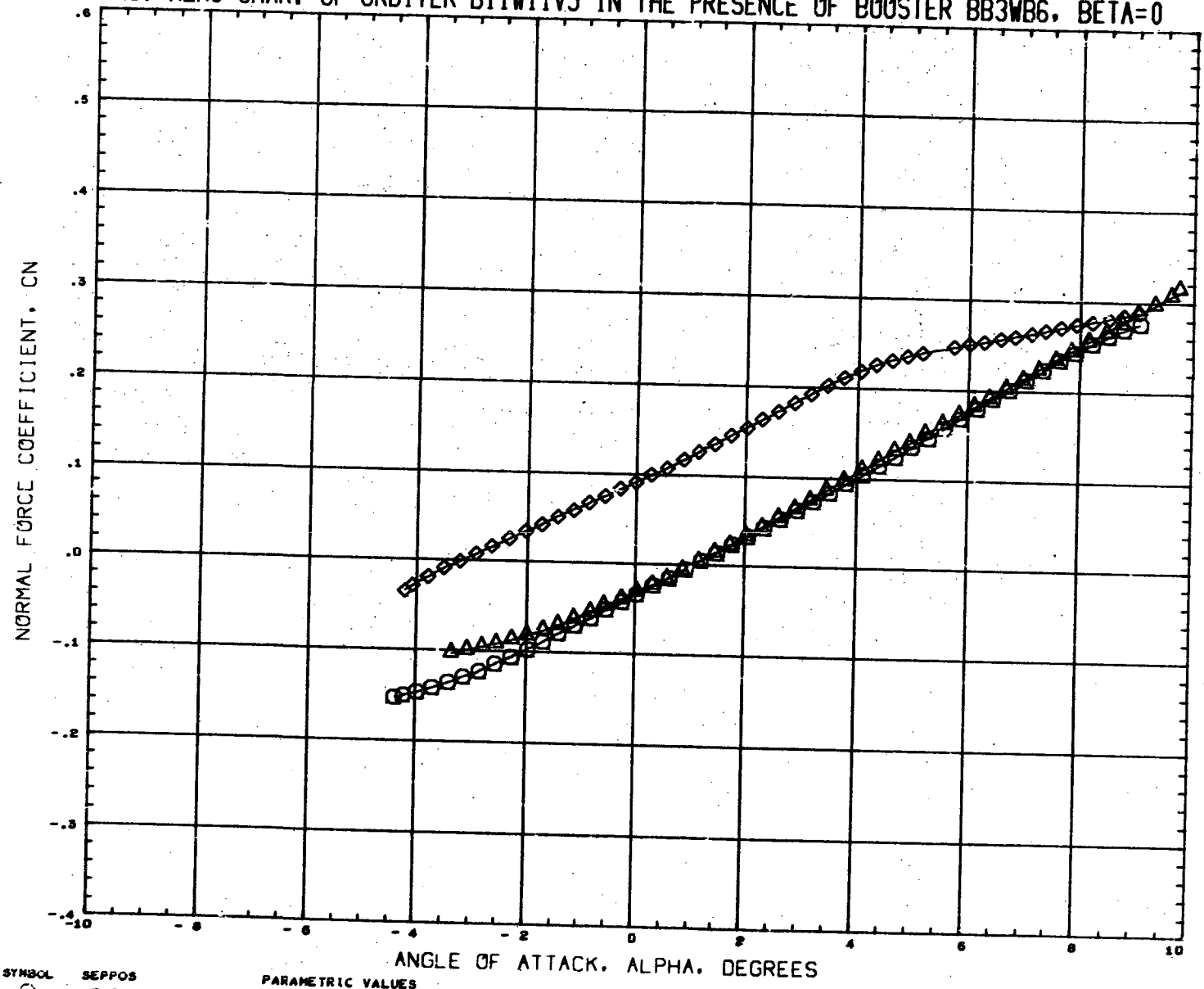
BETA	- 0.054	MACH	1.370
ALPB	3.849	BETB	- 0.006

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

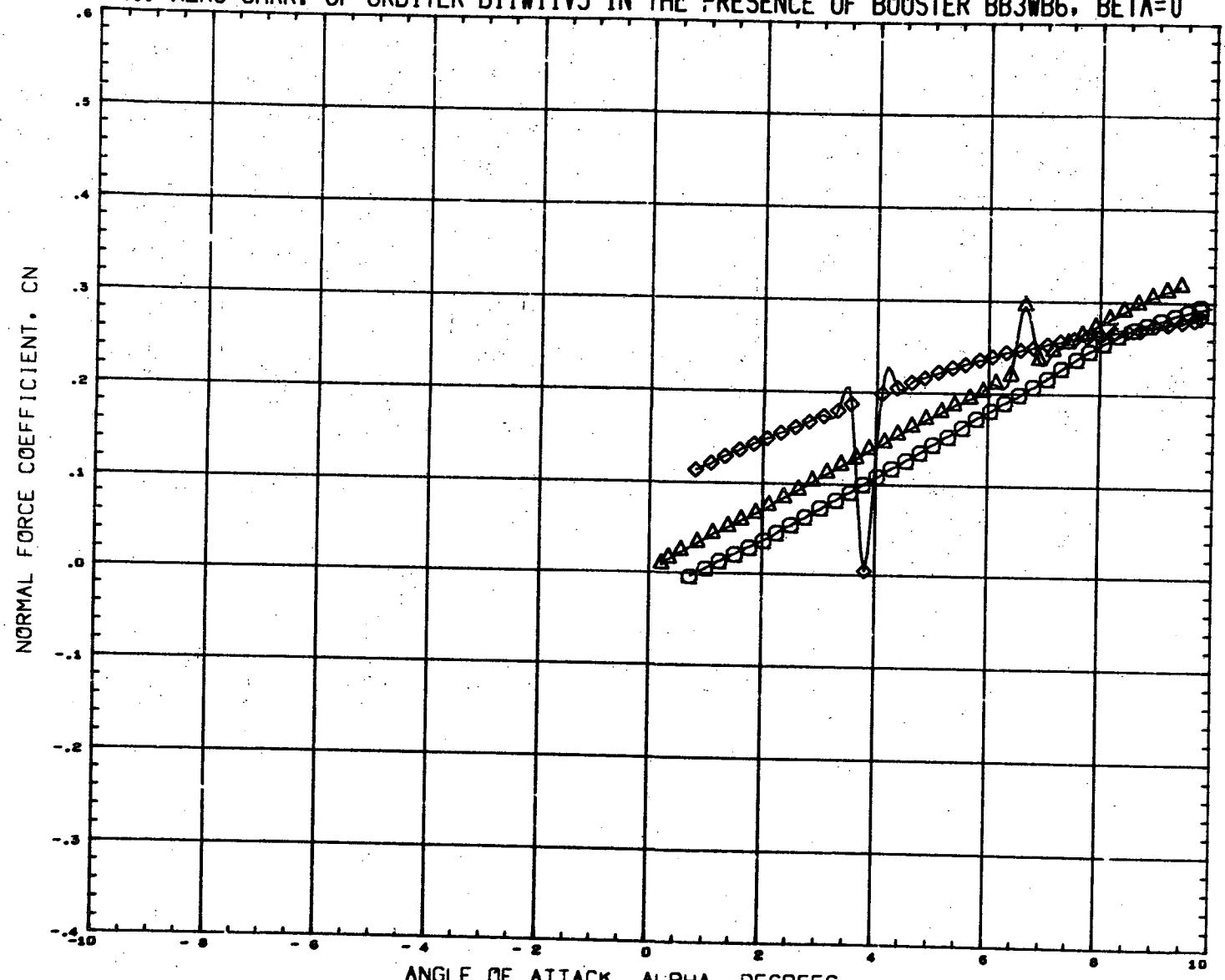
BETA	- 0.054	MACH	1.370
ALPB	3.849	SETB	- 0.006

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



SYMBOL	SEPPOS
▽	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

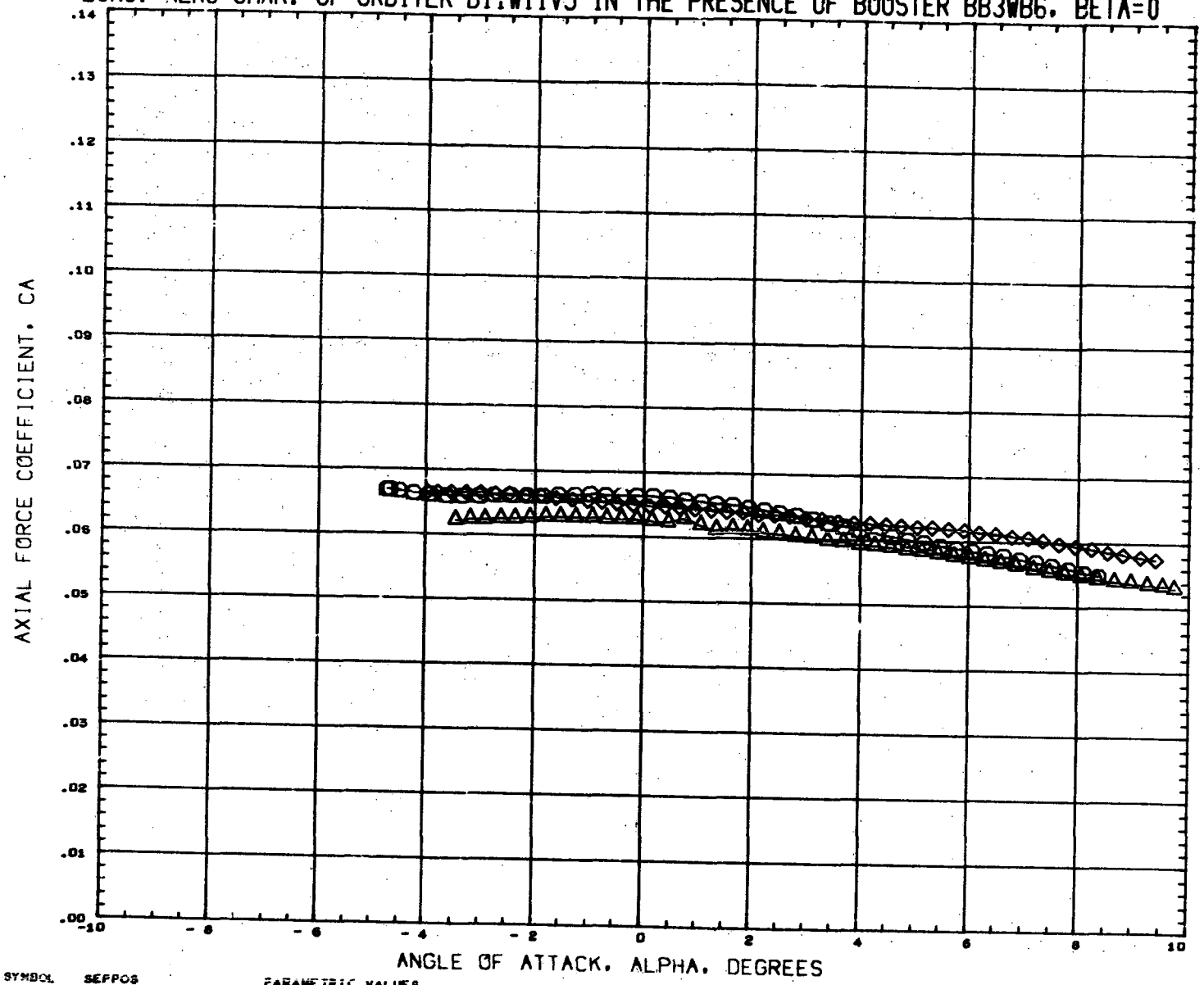
BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3820	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



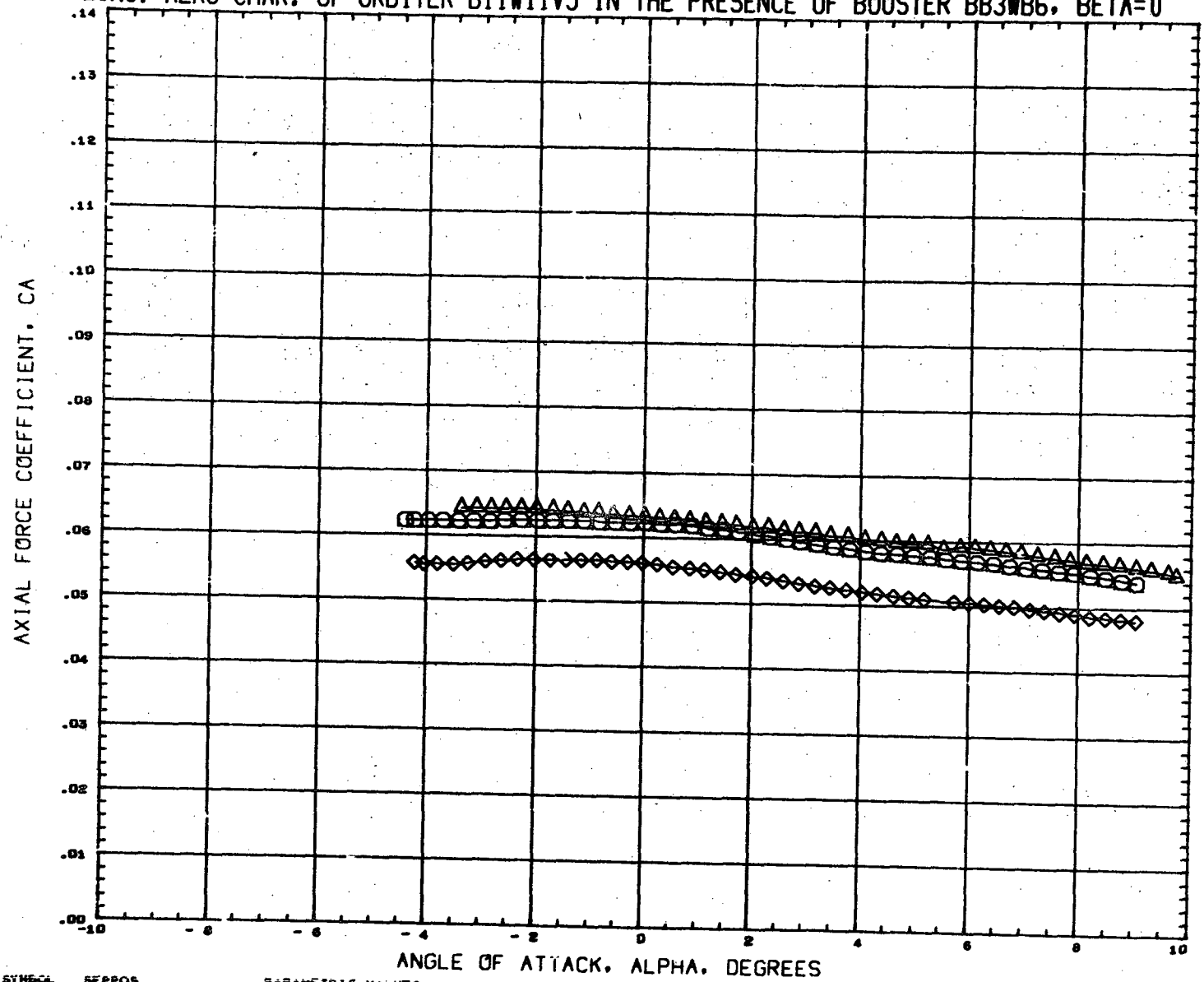
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.054	MACH	1.370
△	0.005	ALPB	3.849	BETB	- 0.006
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

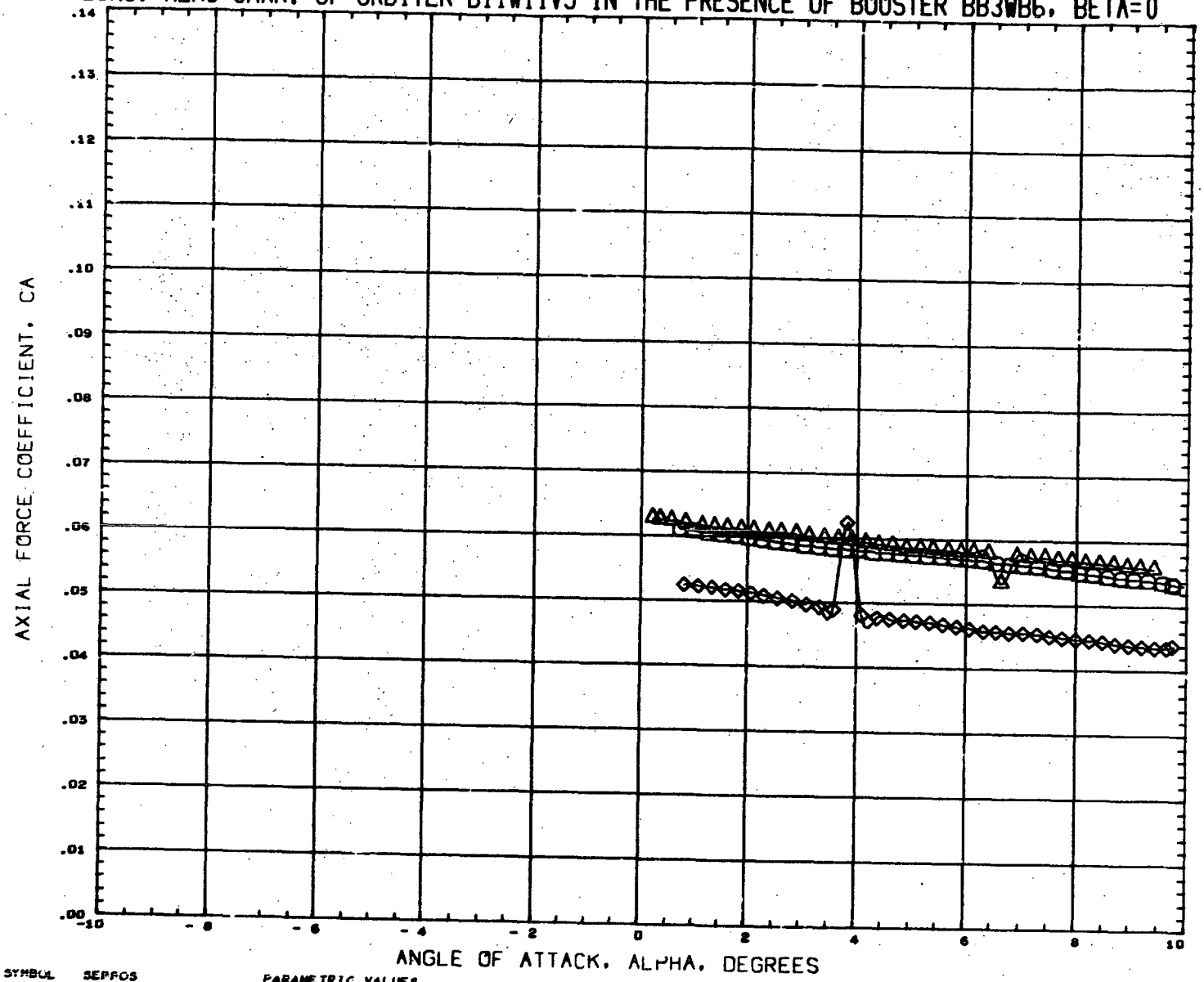
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

MSC S-30 ORBITER B11W11V5 NEAR BB3WB6 (RCU034) 21 JUN 71 PAGE 119

LONG. AERO CHAR. OF ORBITER B11W11V5 IN THE PRESENCE OF BOOSTER BB3WB6, BETA=0



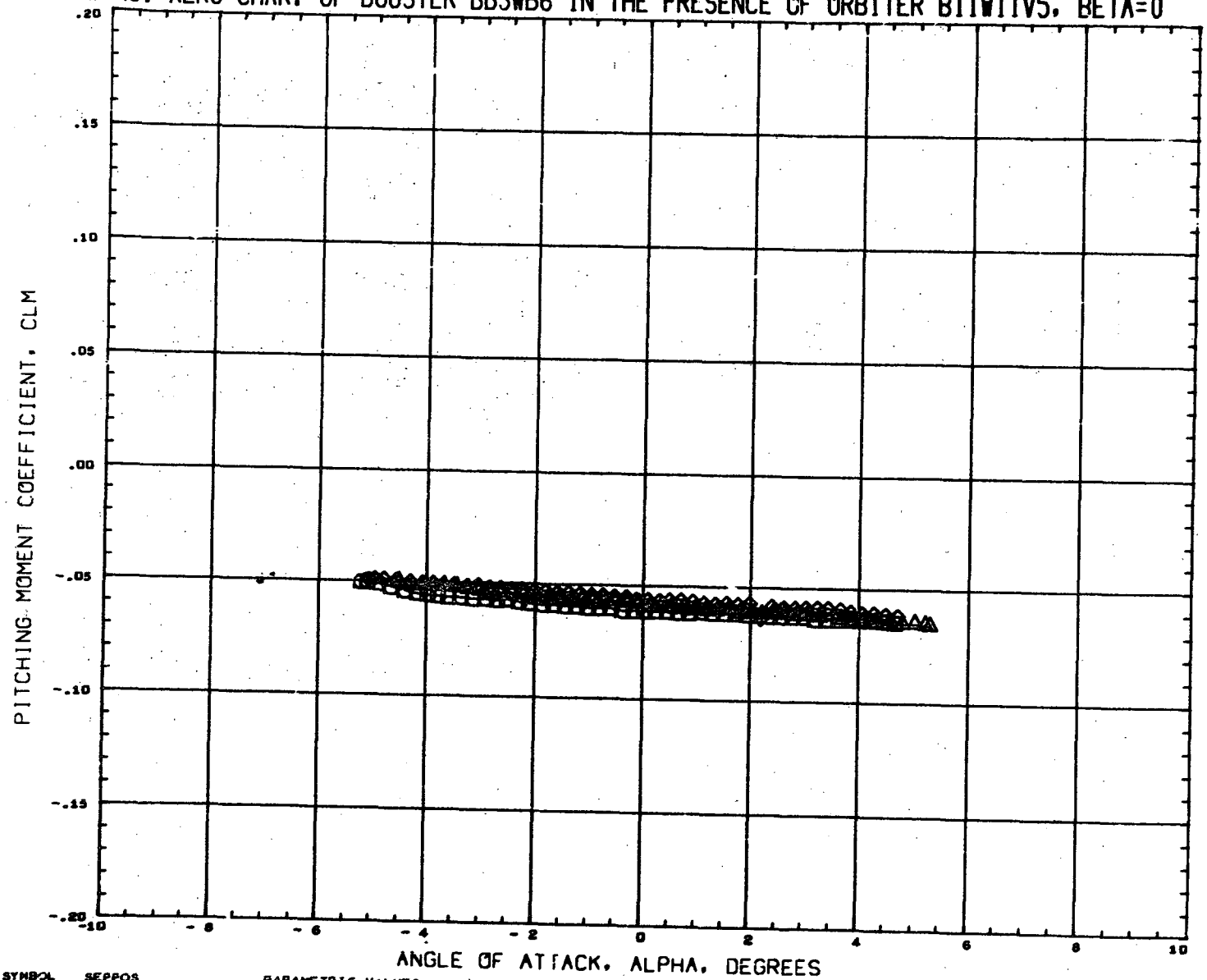
SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.010	BETA	- 0.054	MACH		1.370
△	0.011	ALPB	3.849	BETB	-	0.006
◇	0.012					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

BETA	- 0.041	MACH	0.600
ALPB	0.166	BETB	- 0.008

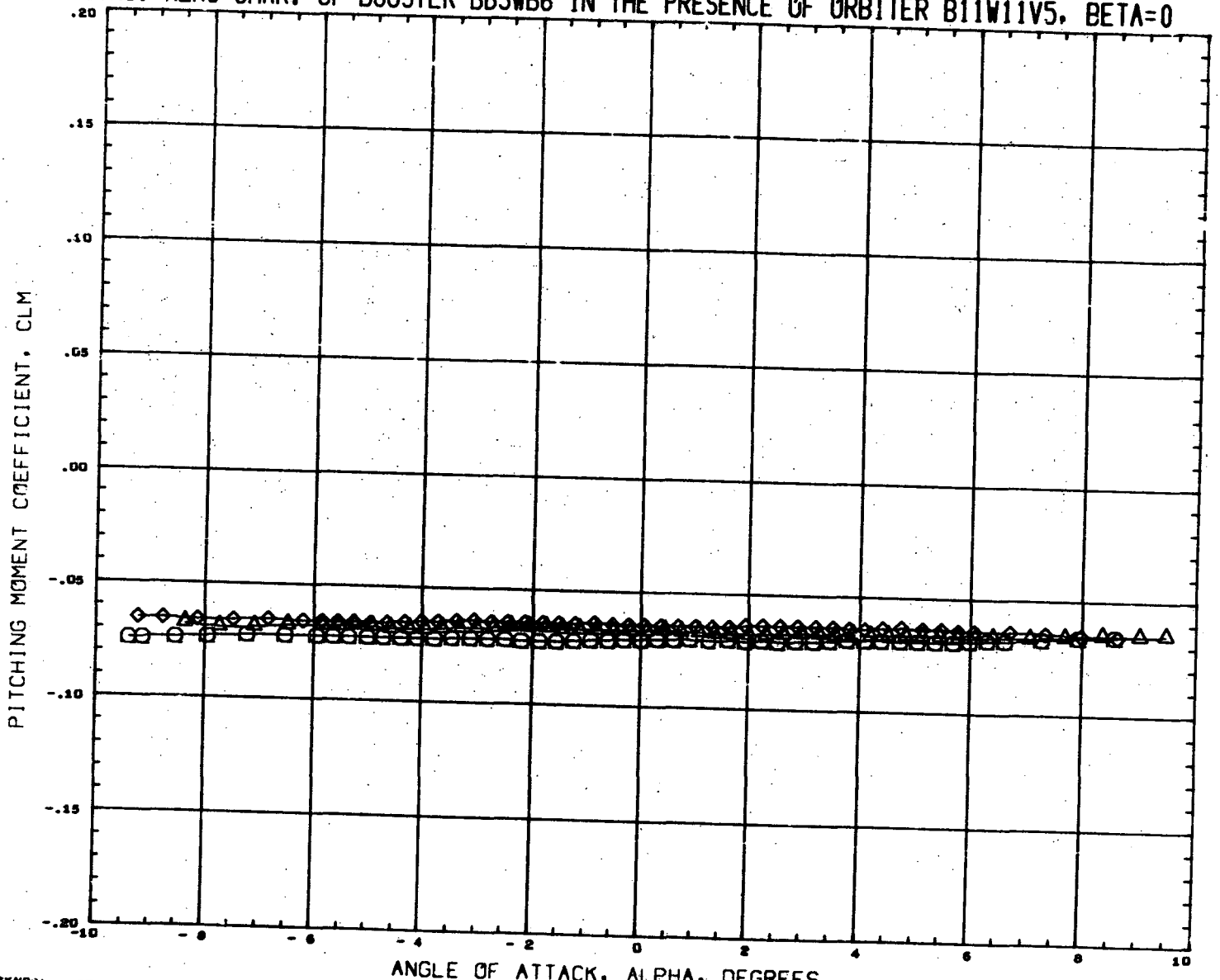
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU076) 21 JUN 71 PAGE 121

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0

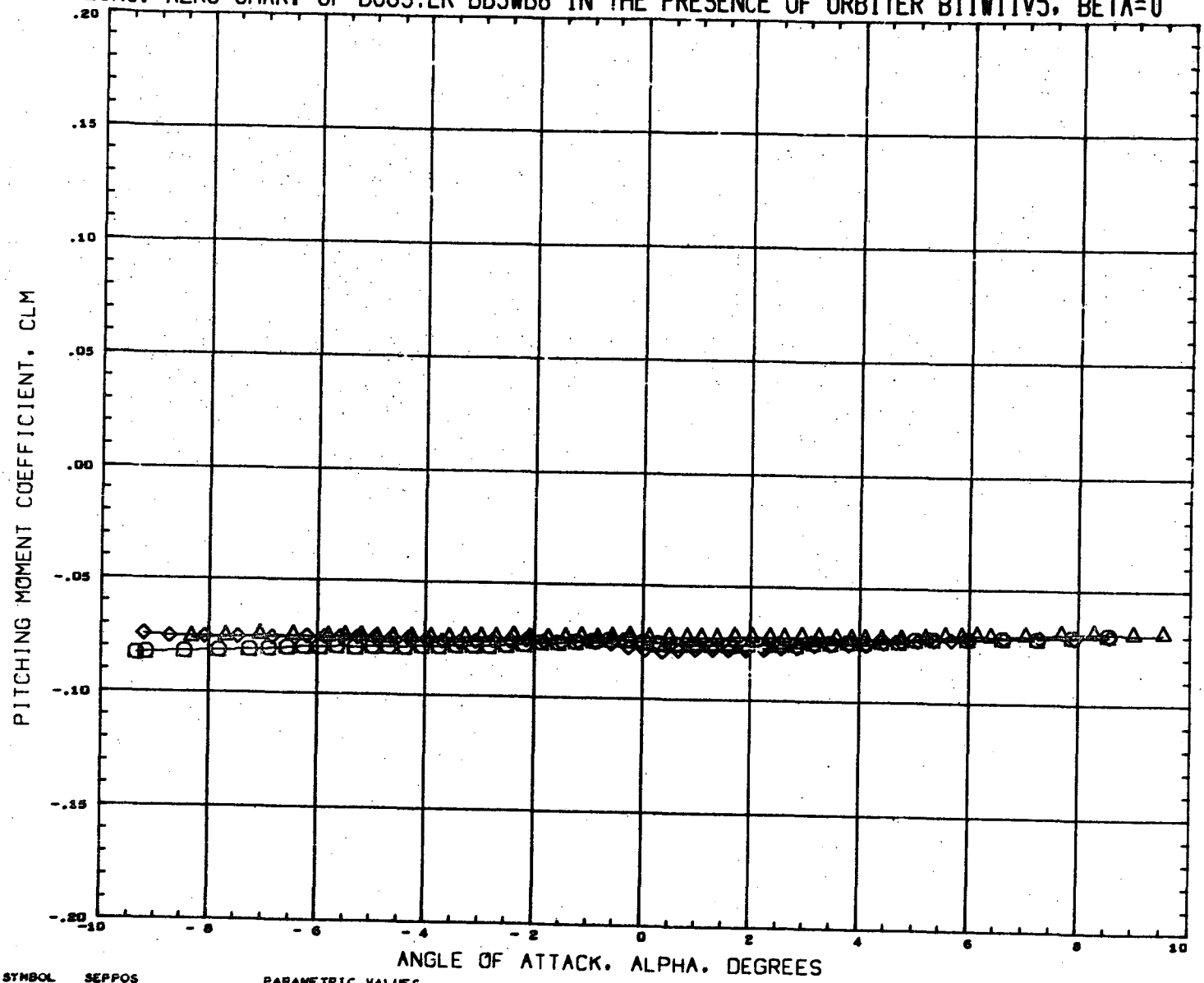


SYMBOL	SEPPOS		PARAMETRIC VALUES		
◇	0.004	BETA	- 0.041	MACH	0.600
△	0.005	ALPB	0.166	BETB	- 0.008
○	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
⋈	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

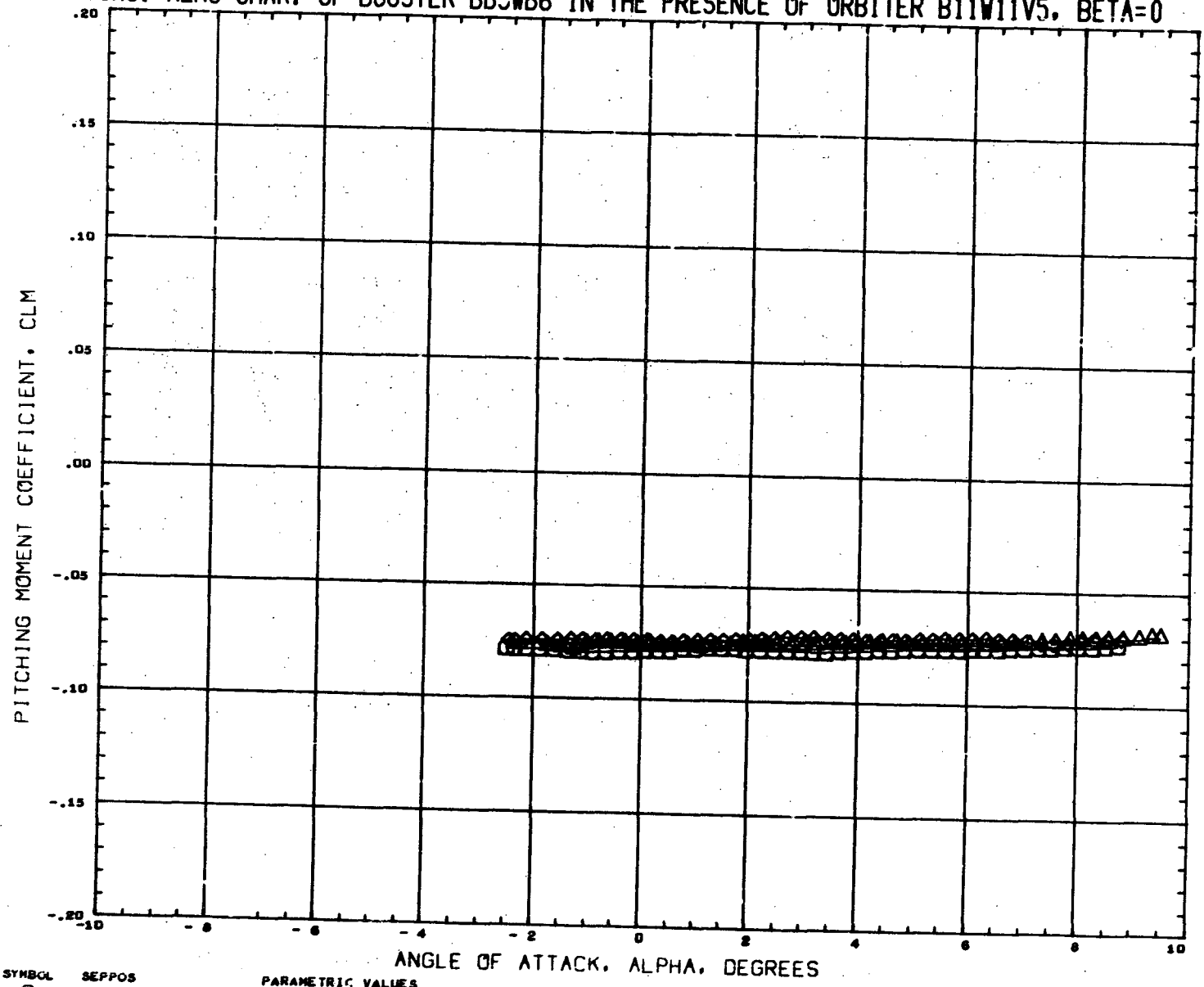
BETA	- 0.041	MACH	0.600		
ALPB	0.166	BETB	- 0.008		

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

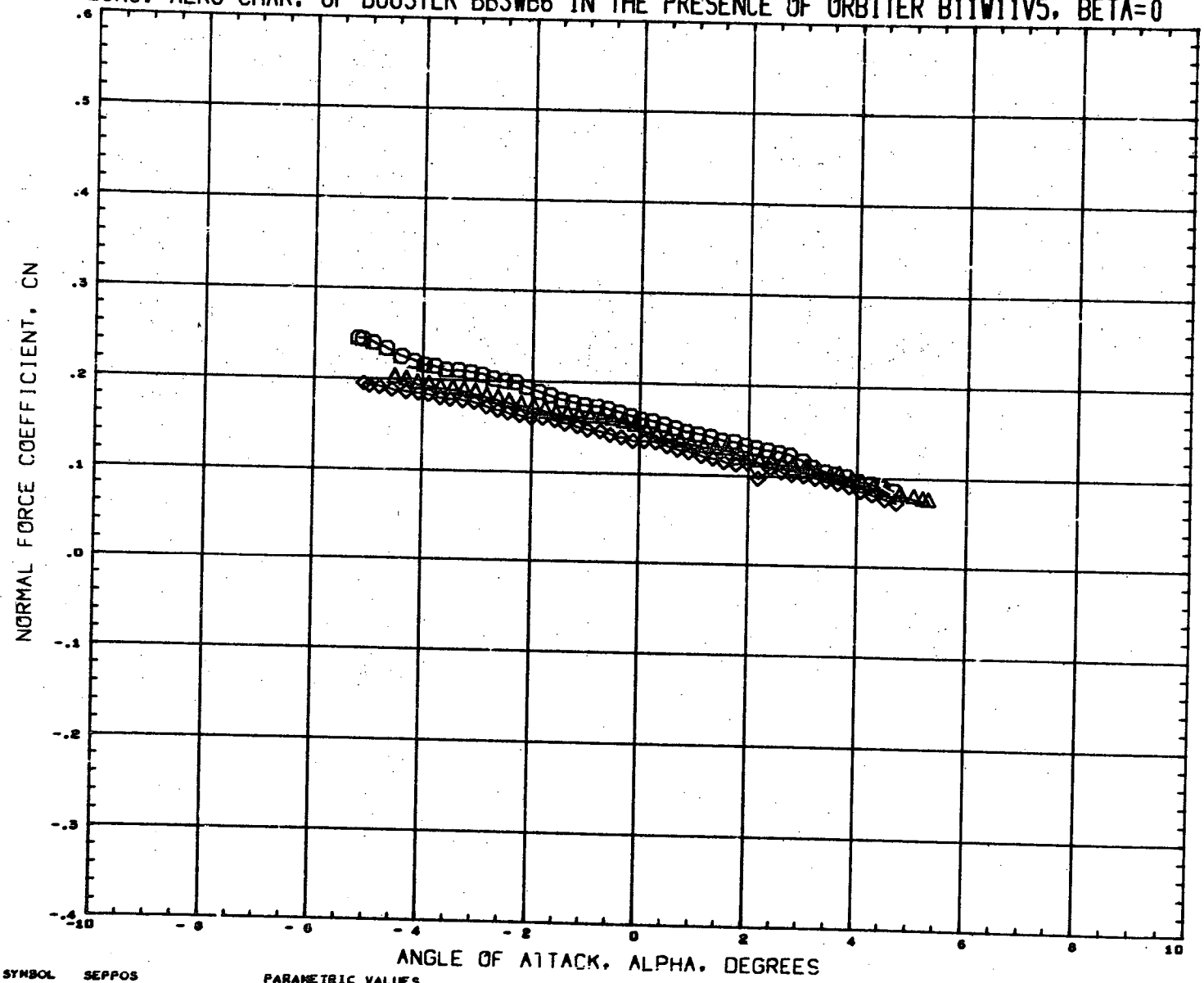
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILL .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



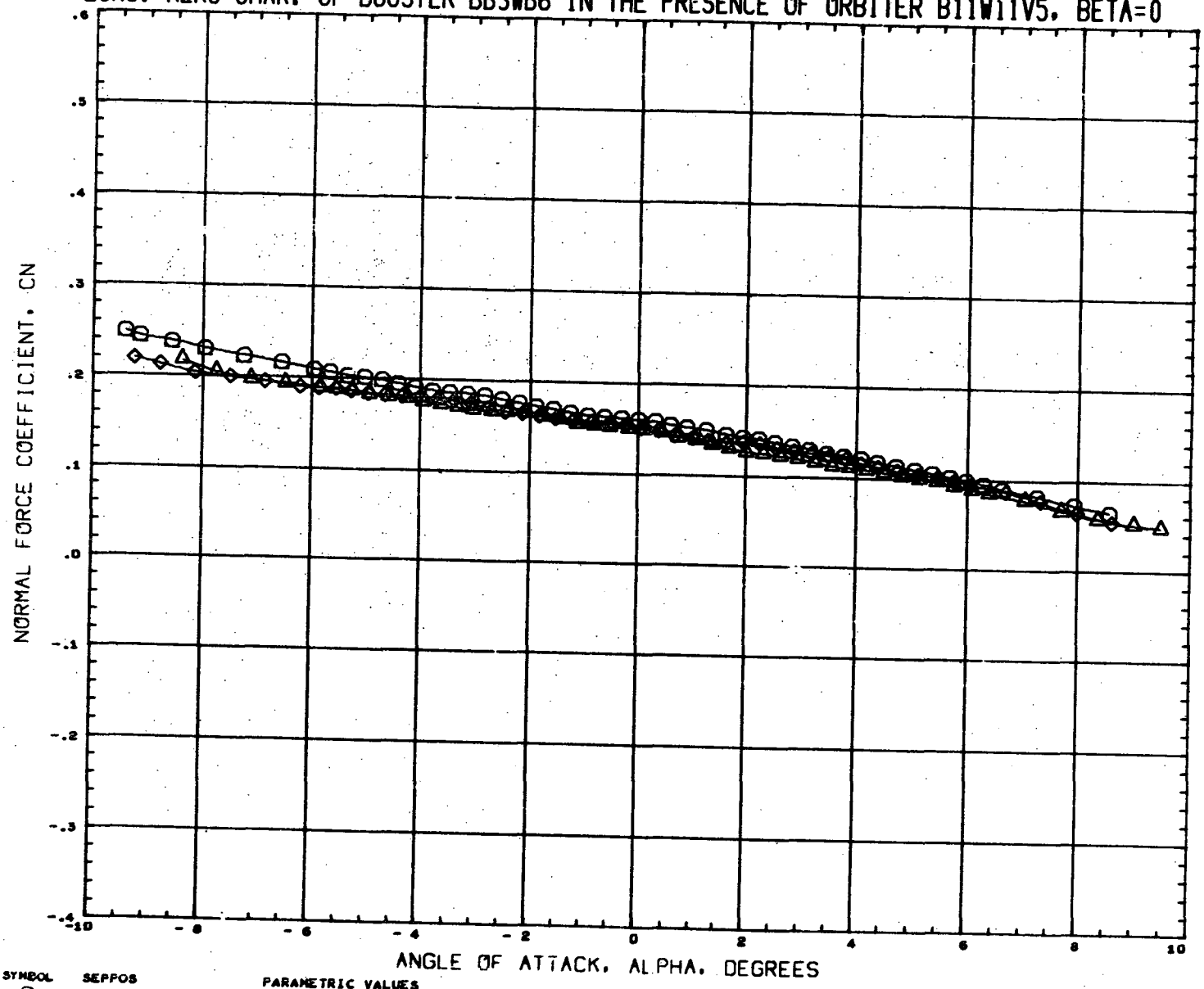
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.041	MACH	0.600	
△	0.002	ALPB	0.166	BETB	- 0.008	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0086	

LØNG. AERØ CHAR. ØF BØØSTER BB3WB6 IN THE PRESENCE ØF ØRBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

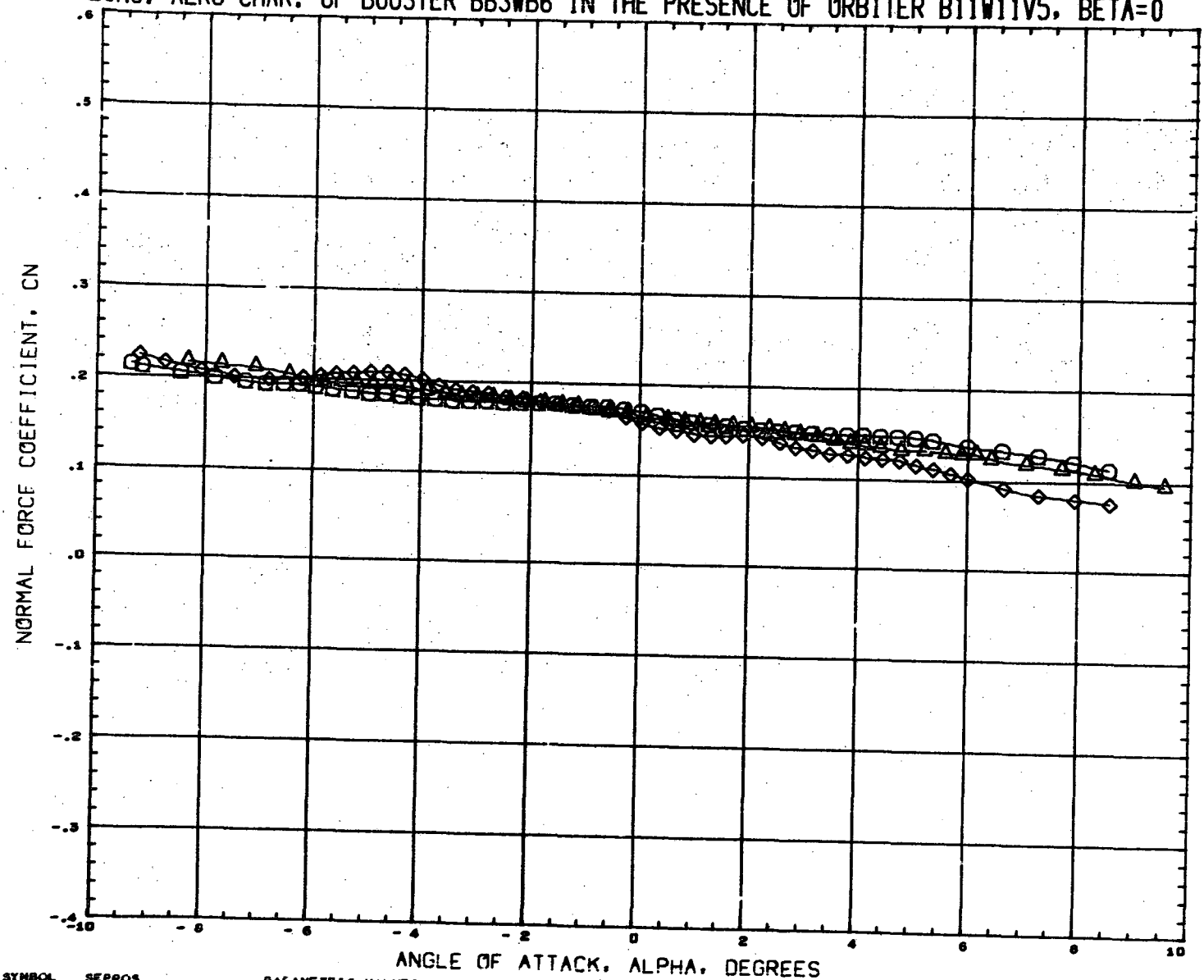
BETA	- 0.041	MACH		0.600
ALPB	0.166	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



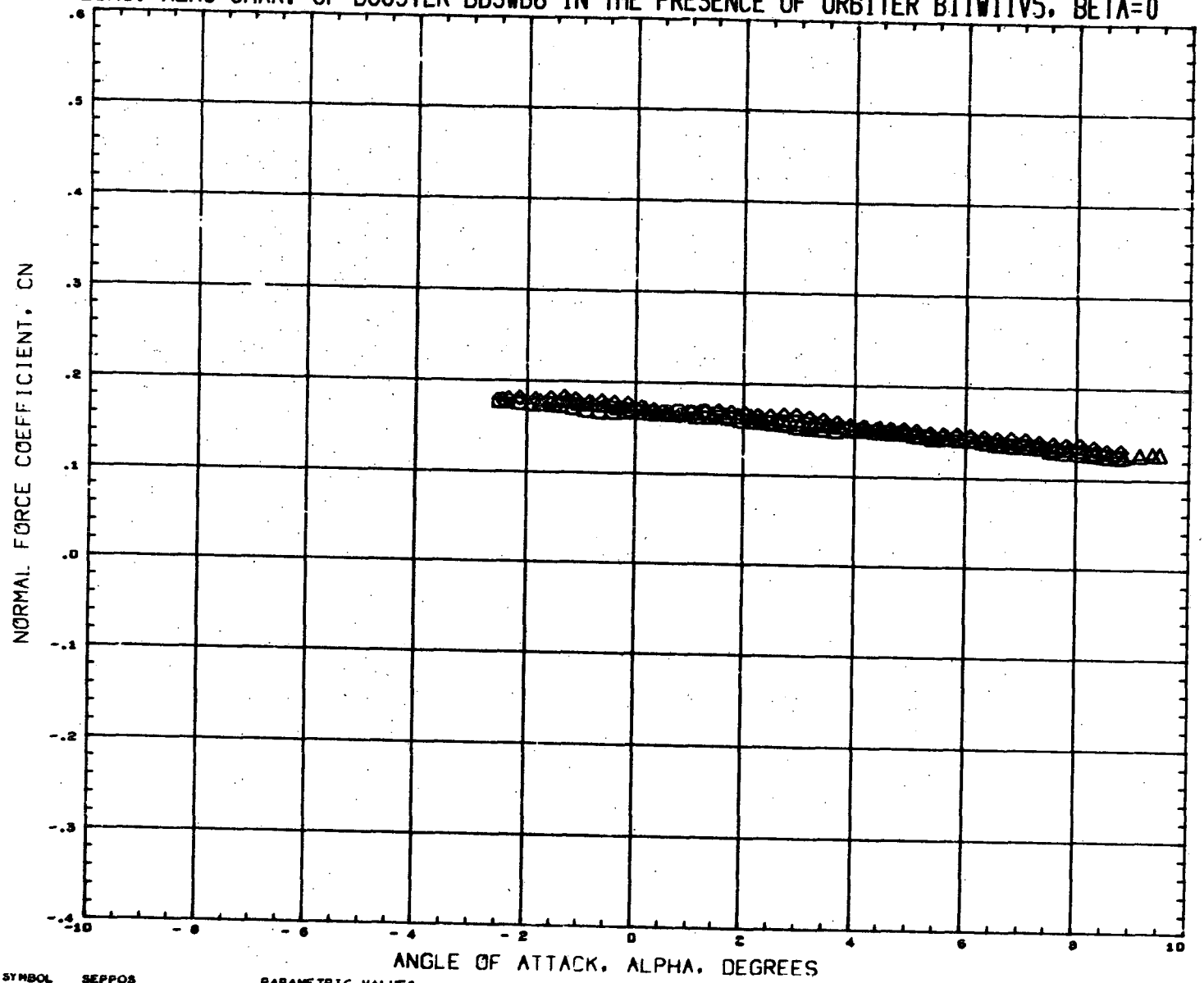
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.007	BETA	- 0.041	MACH	0.600
△	0.008	ALPB	0.166	EETB	- 0.008
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

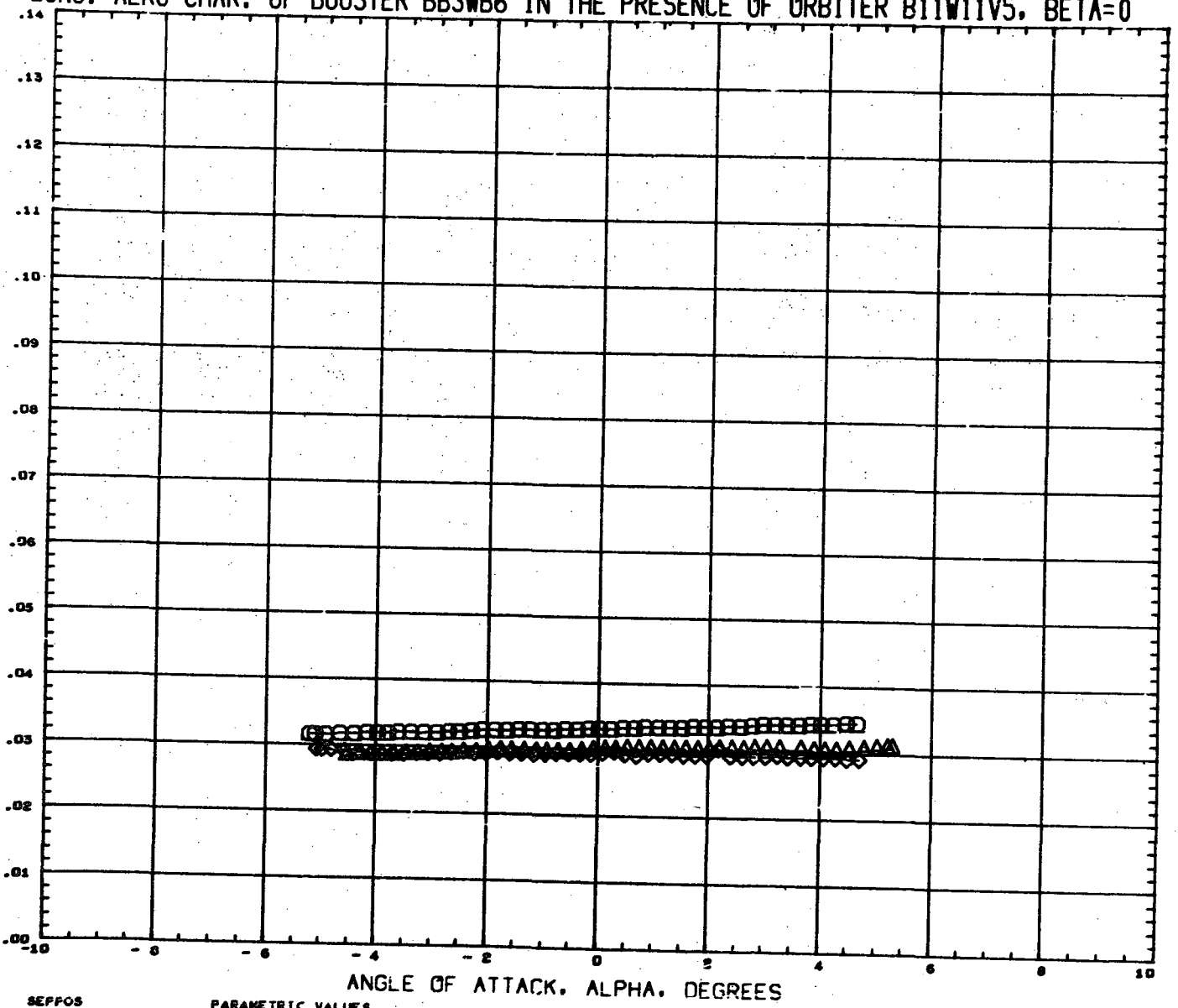
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8993	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFFOS
◇	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

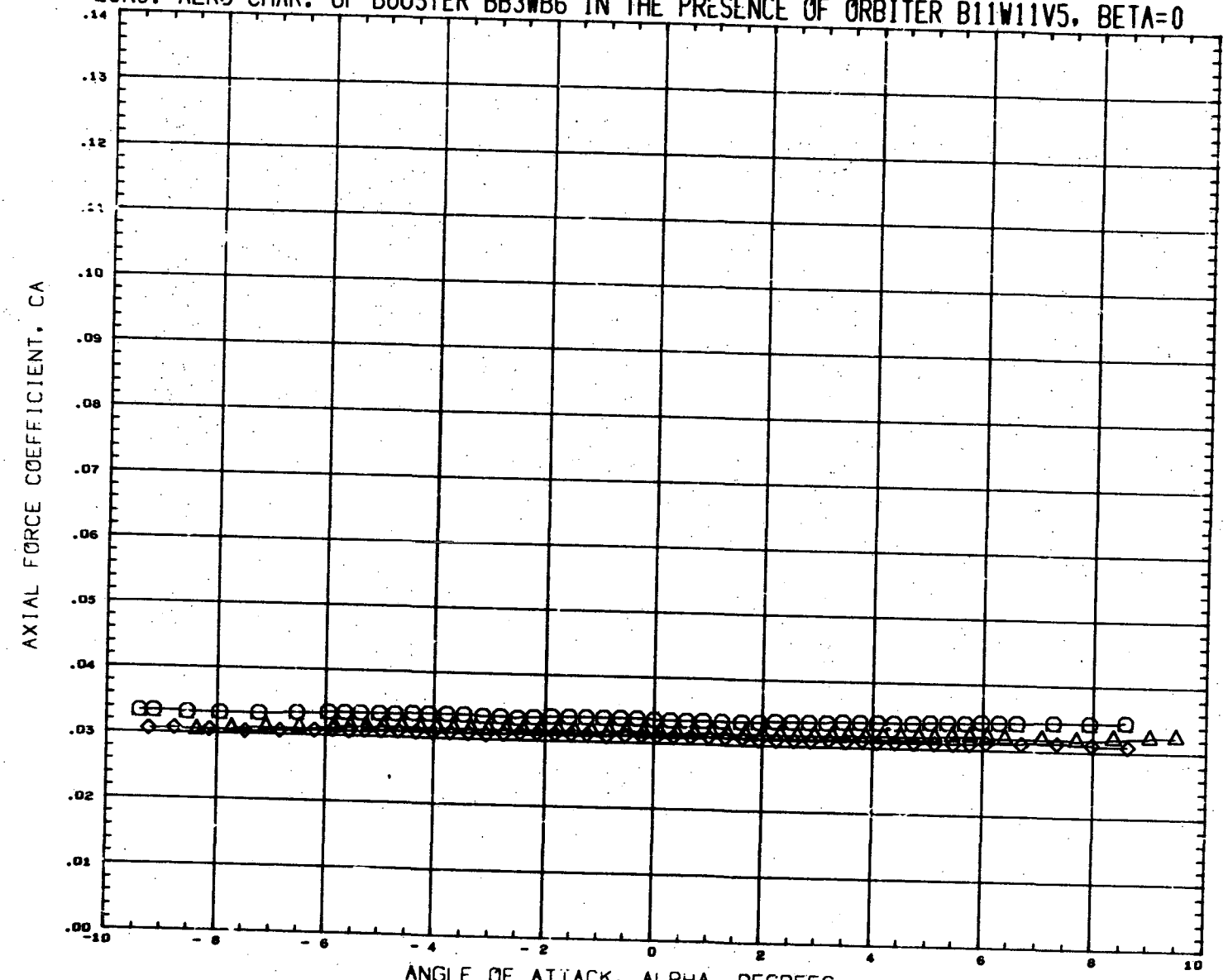
BETA	-	0.041	MACH		0.600
ALPB		0.166	SETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3710	IN
XMRP	15.0990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

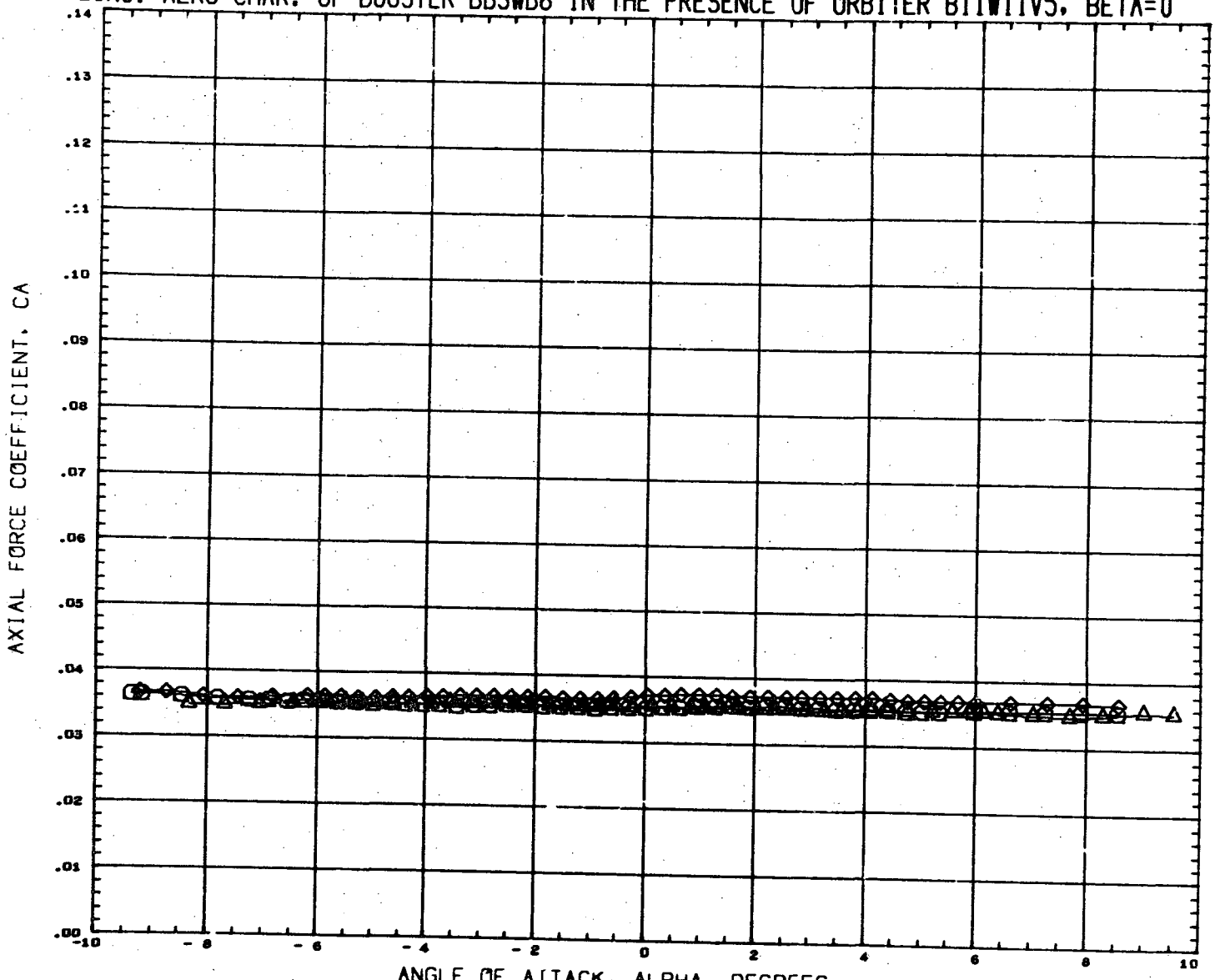
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU076) 21 JUN 71 PAGE 130

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFPOS
◇	0.007
△	0.008
○	0.009

PARAMETRIC VALUES

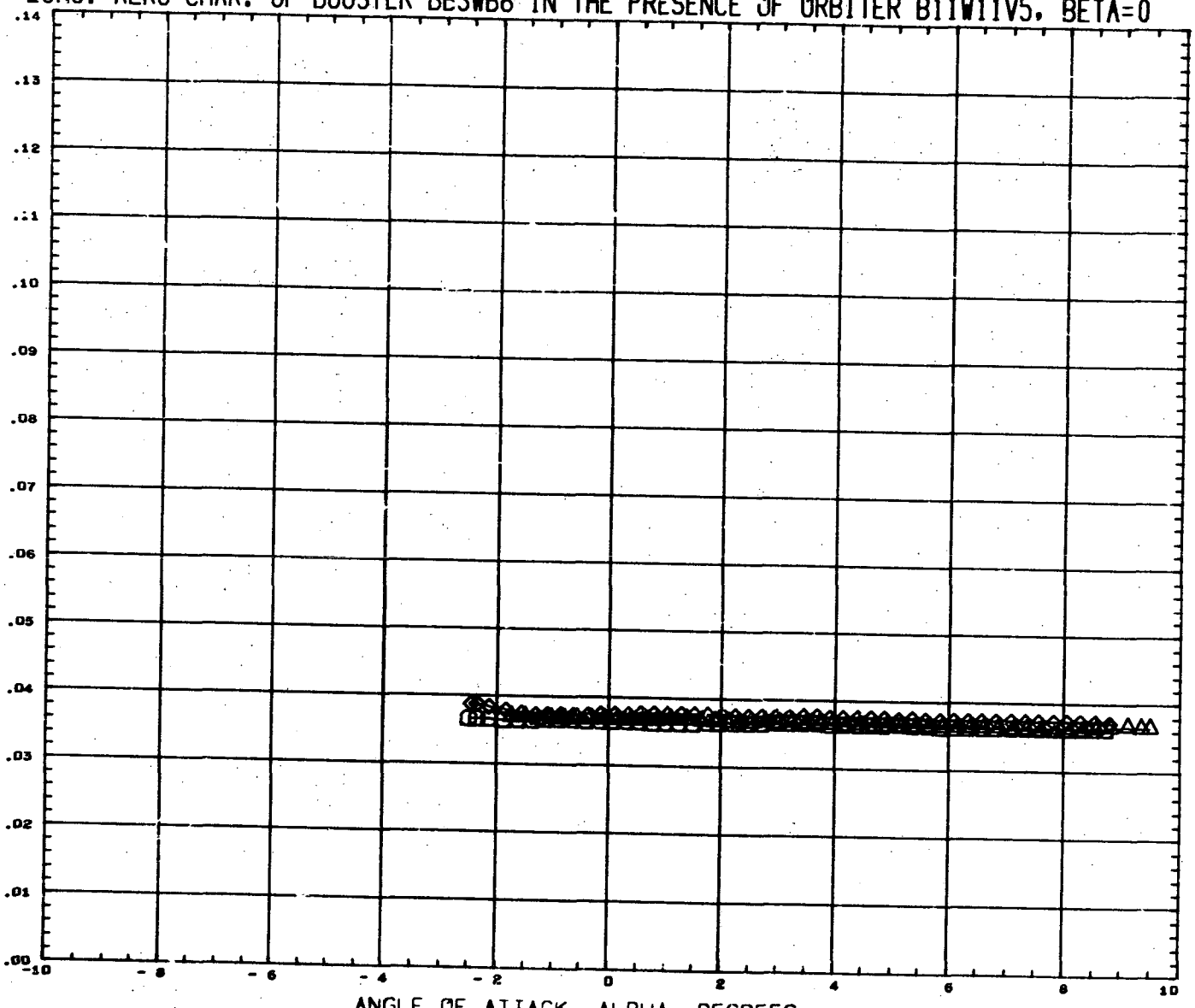
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

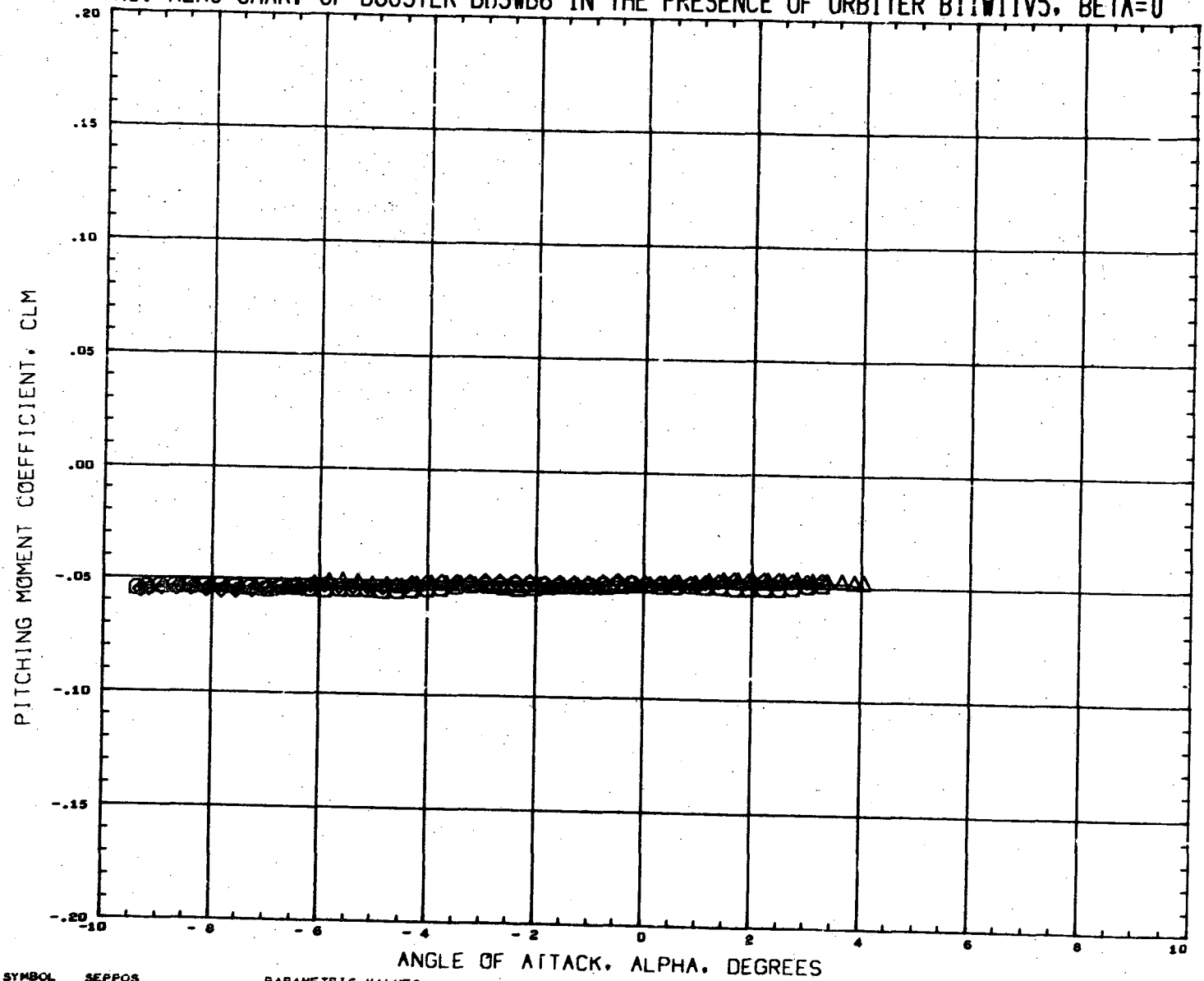
BETA	-	0.041	MACH		0.600
ALPB		0.166	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.6990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

BETA	-	0.009	MACH		0.590
ALFB	-	5.114	BETB	-	0.007

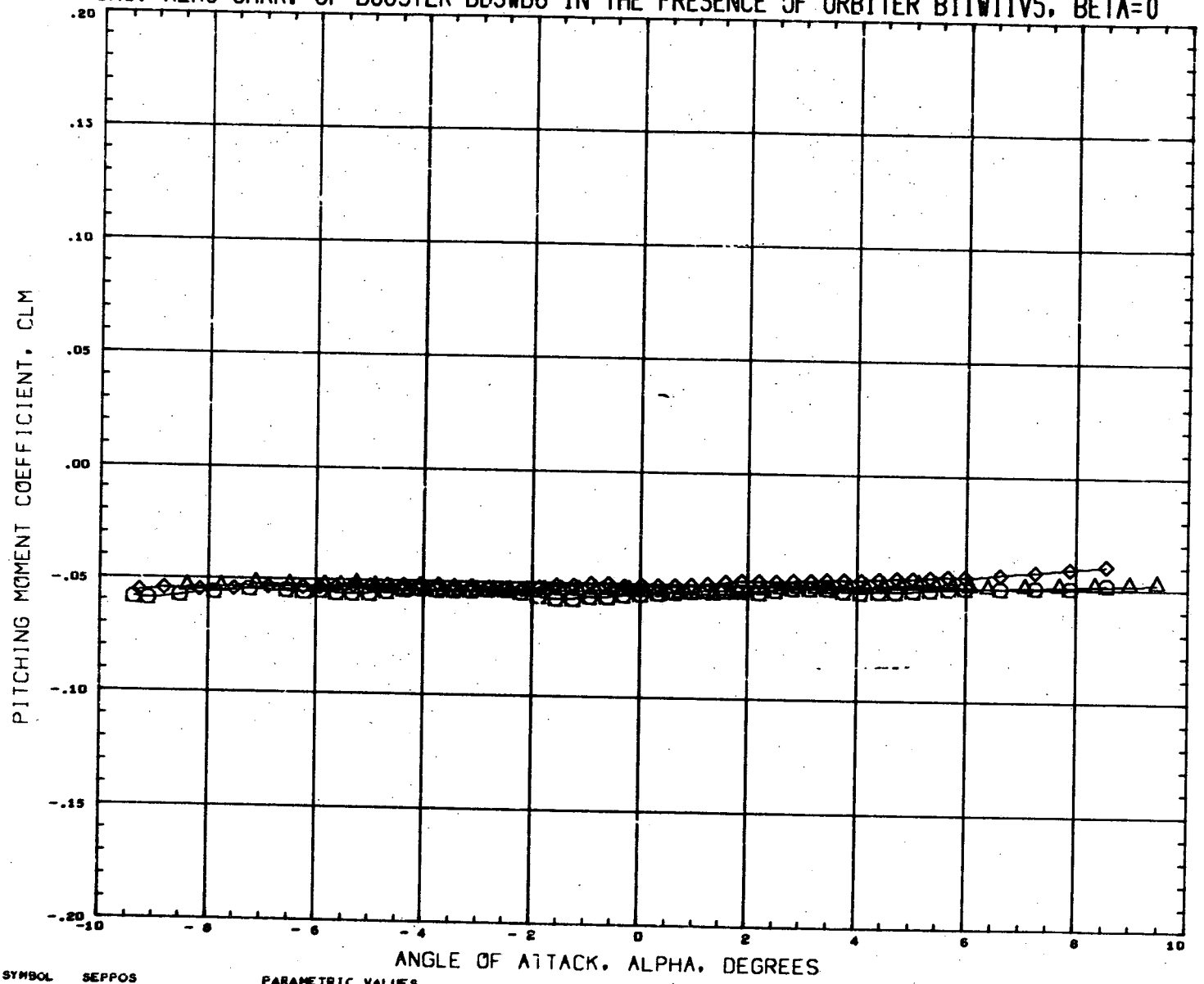
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU057) 21 JUN 71 PAGE 133

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

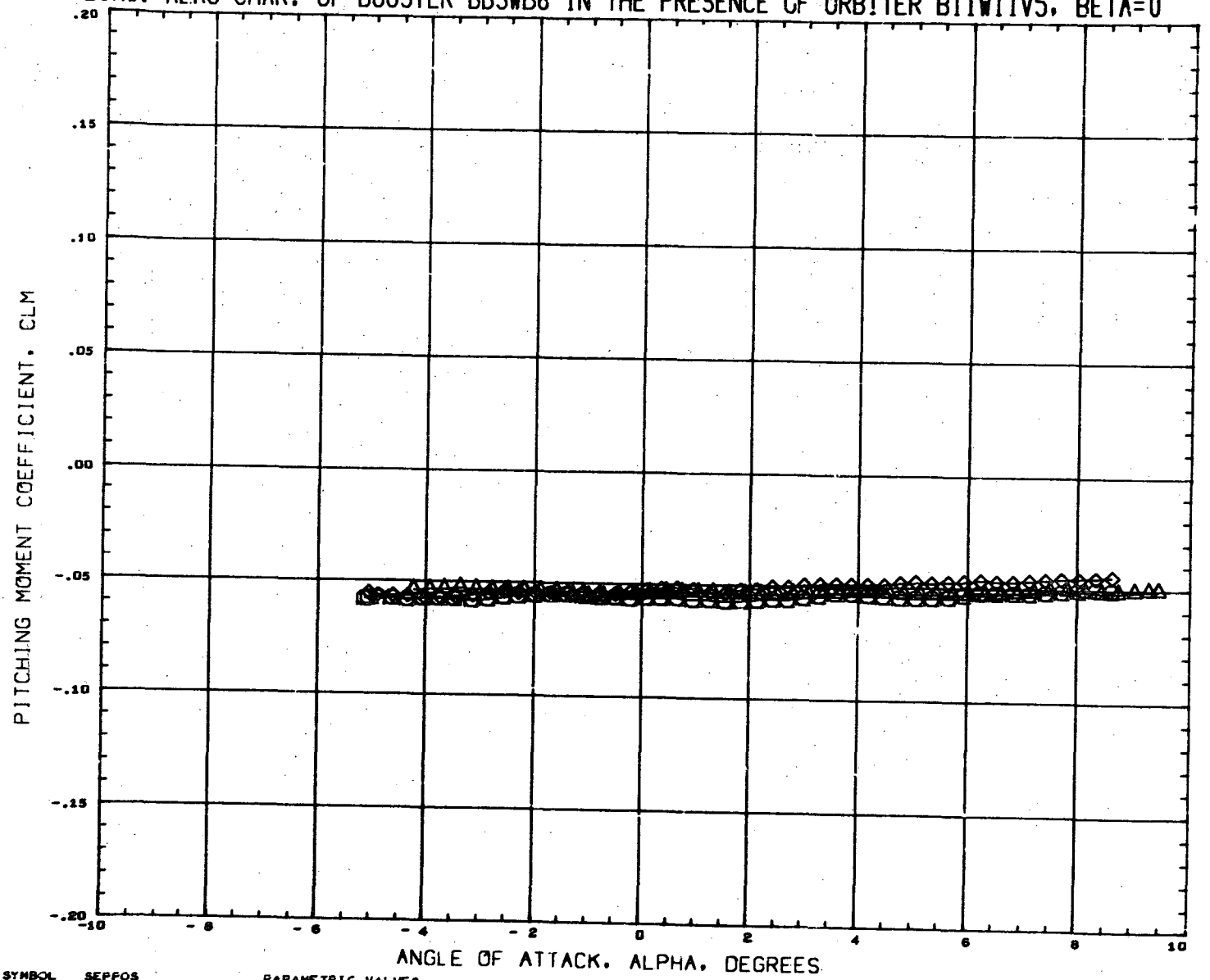
BETA	- 0.009	MACH		0.590
ALFB	- 5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.6000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

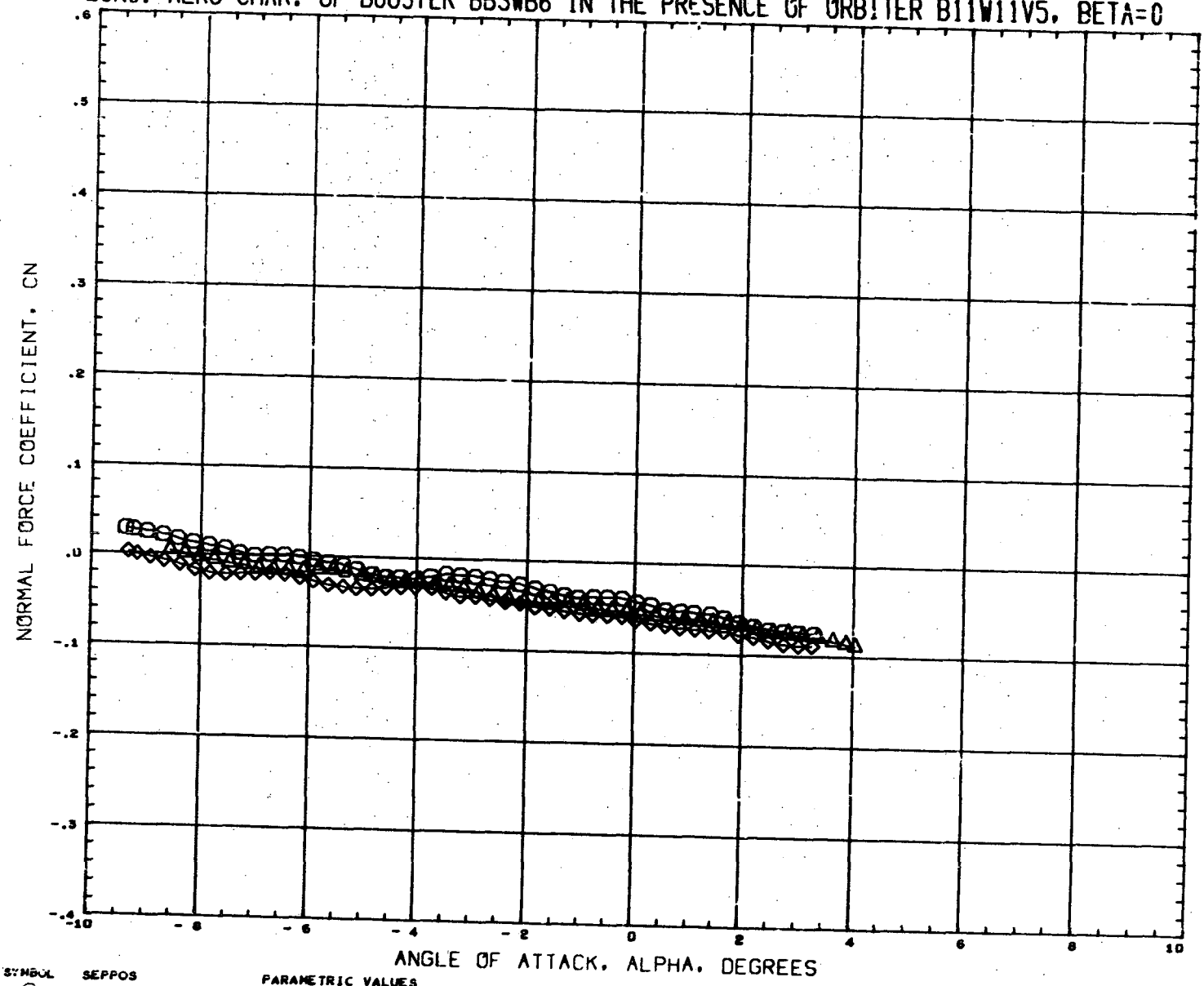
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

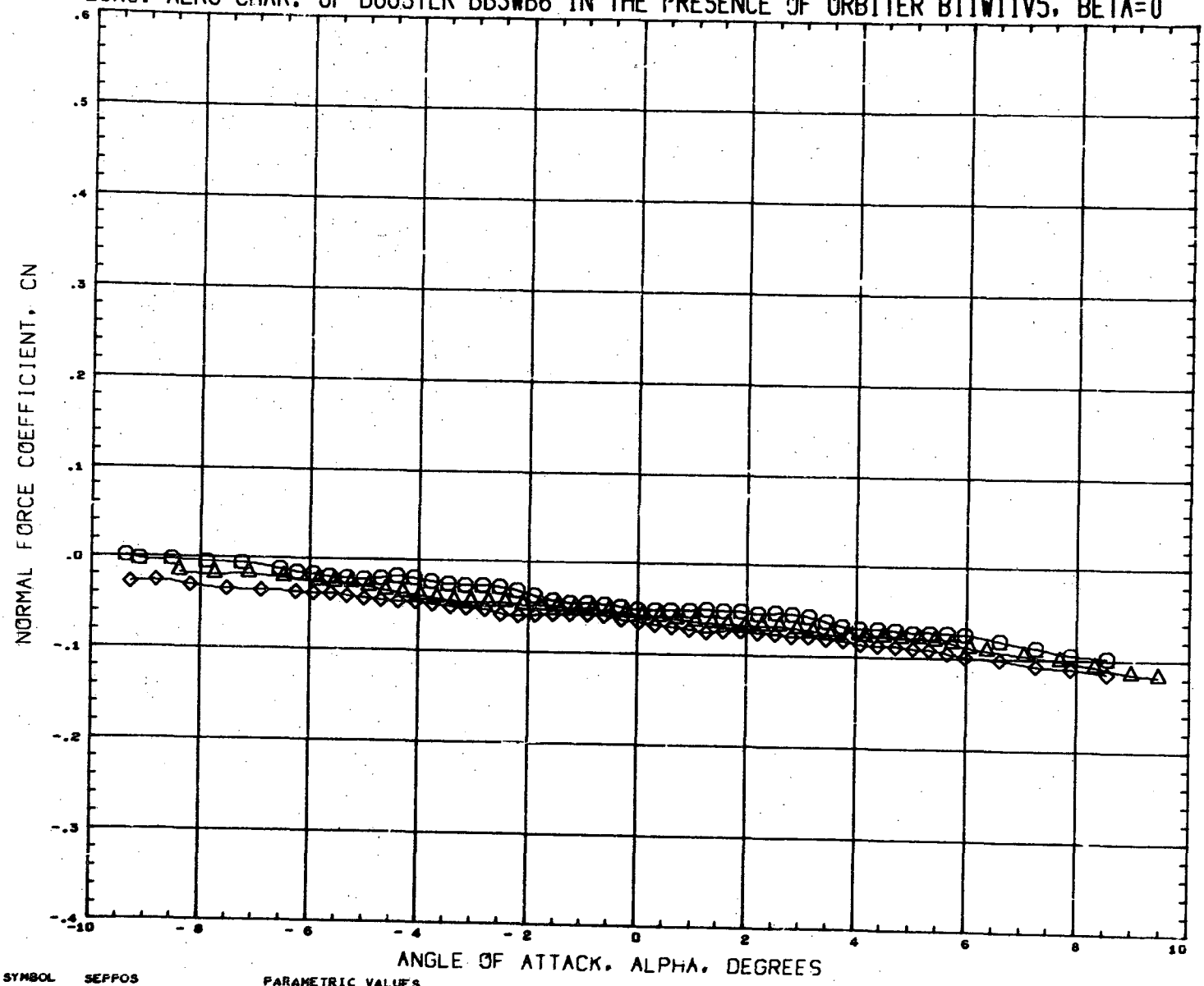
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3730	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



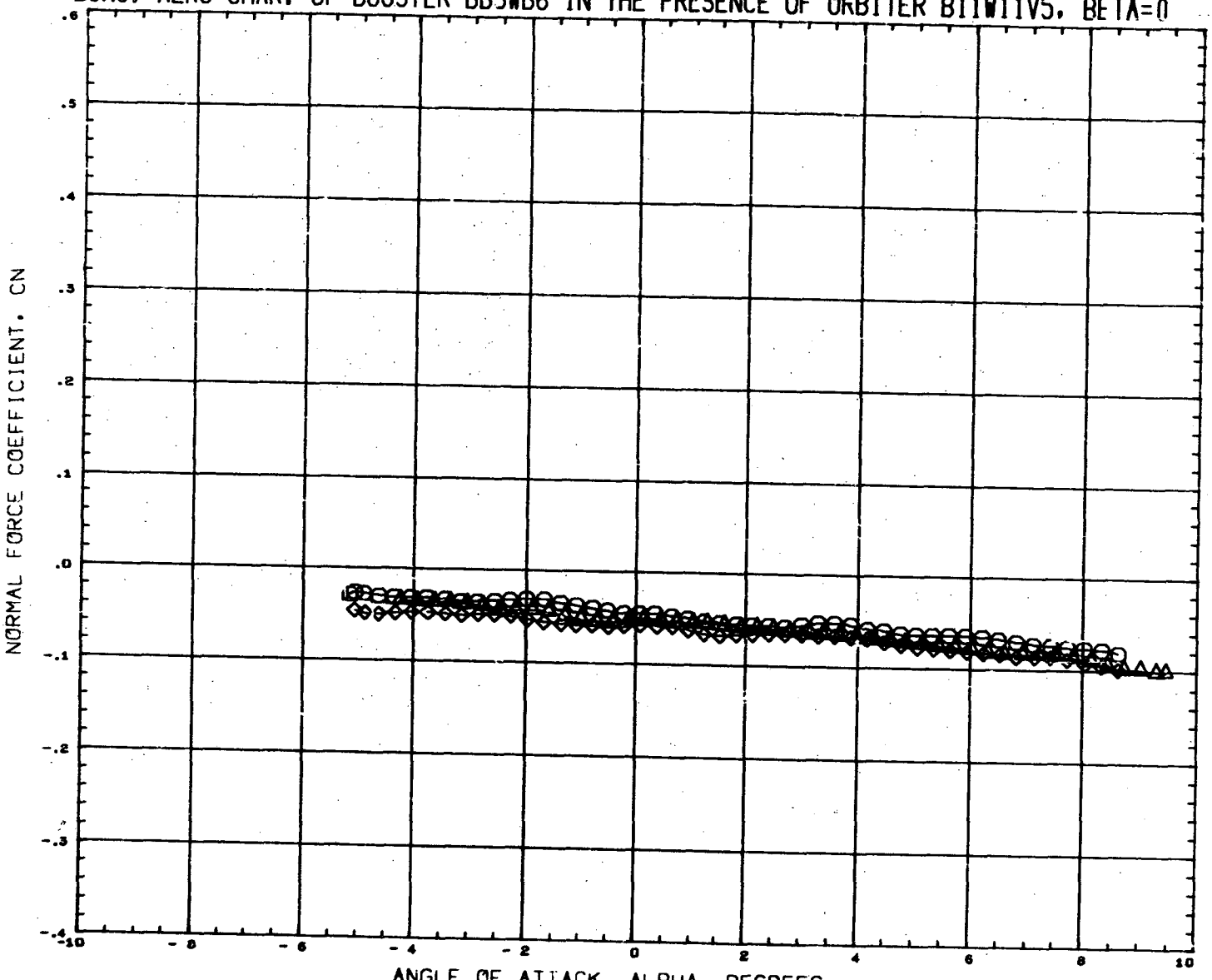
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.009	MACH	0.590	
△	0.008	ALPB	- 5.114	BETB	- 0.007	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8920	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

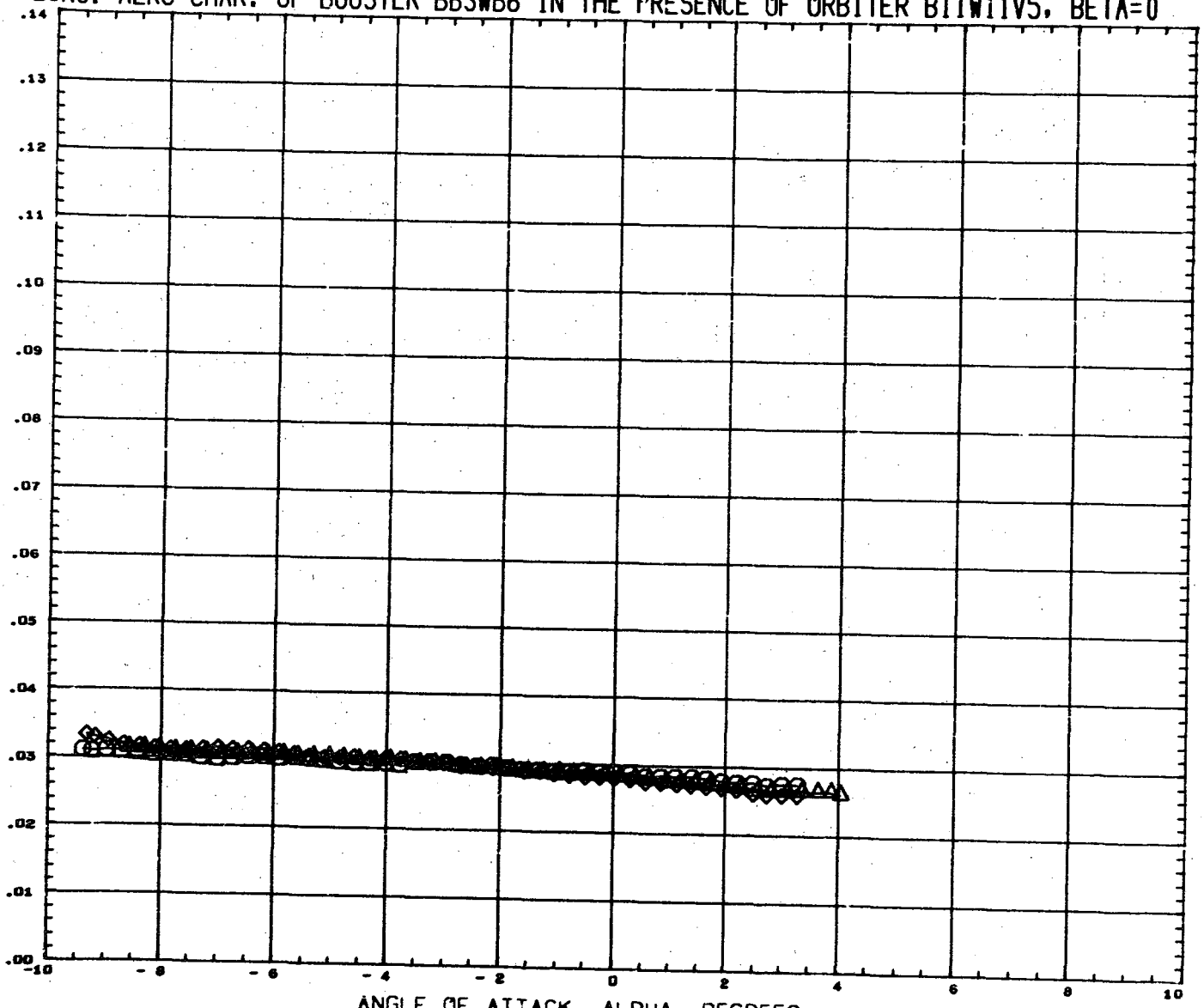
BETA	- 0.009	MACH	0.590
ALPB	- 5.114	BETB	- 0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0080	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

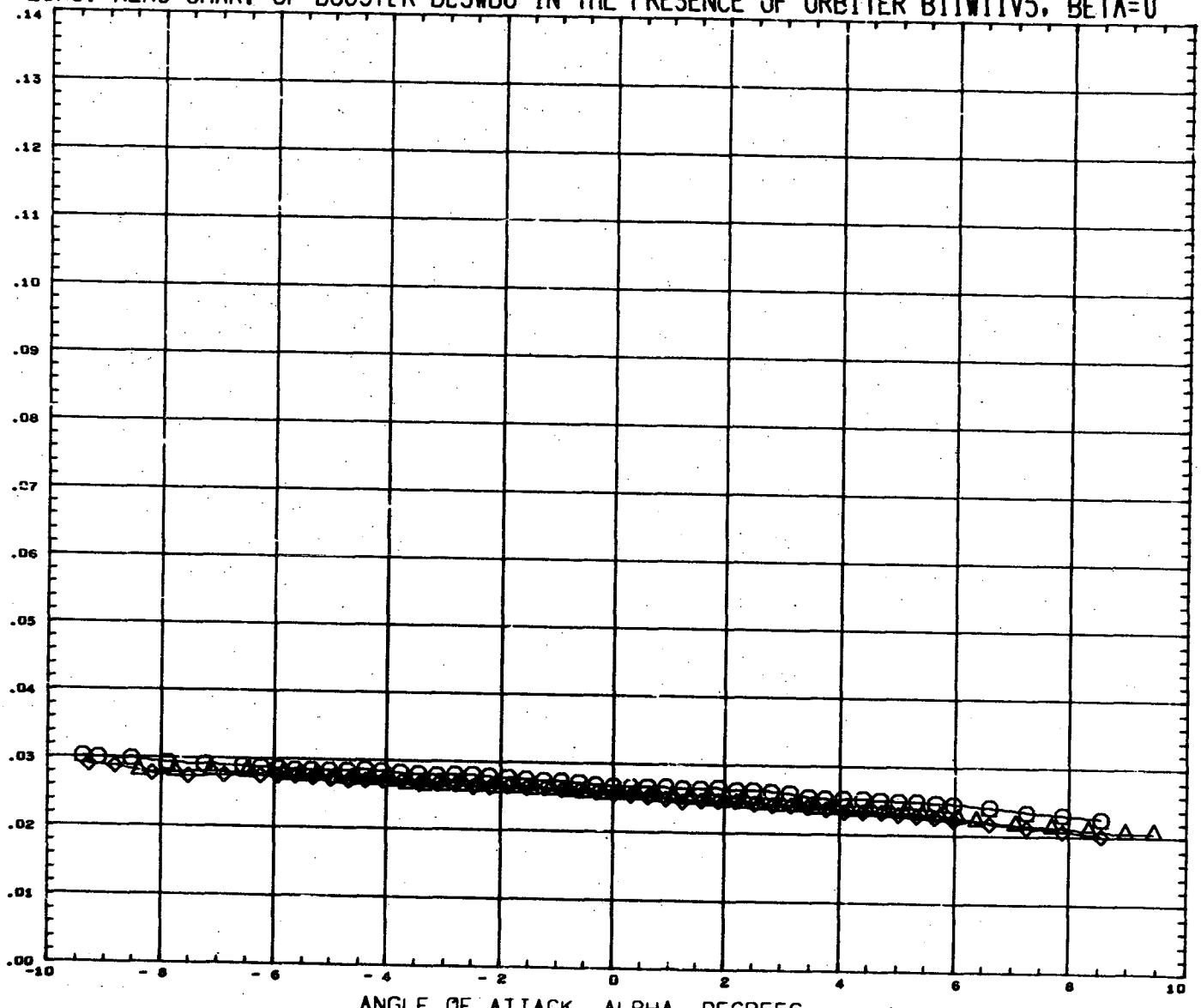
BETA	-	0.009	MACH		0.590
ALPB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	106.6460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRF	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

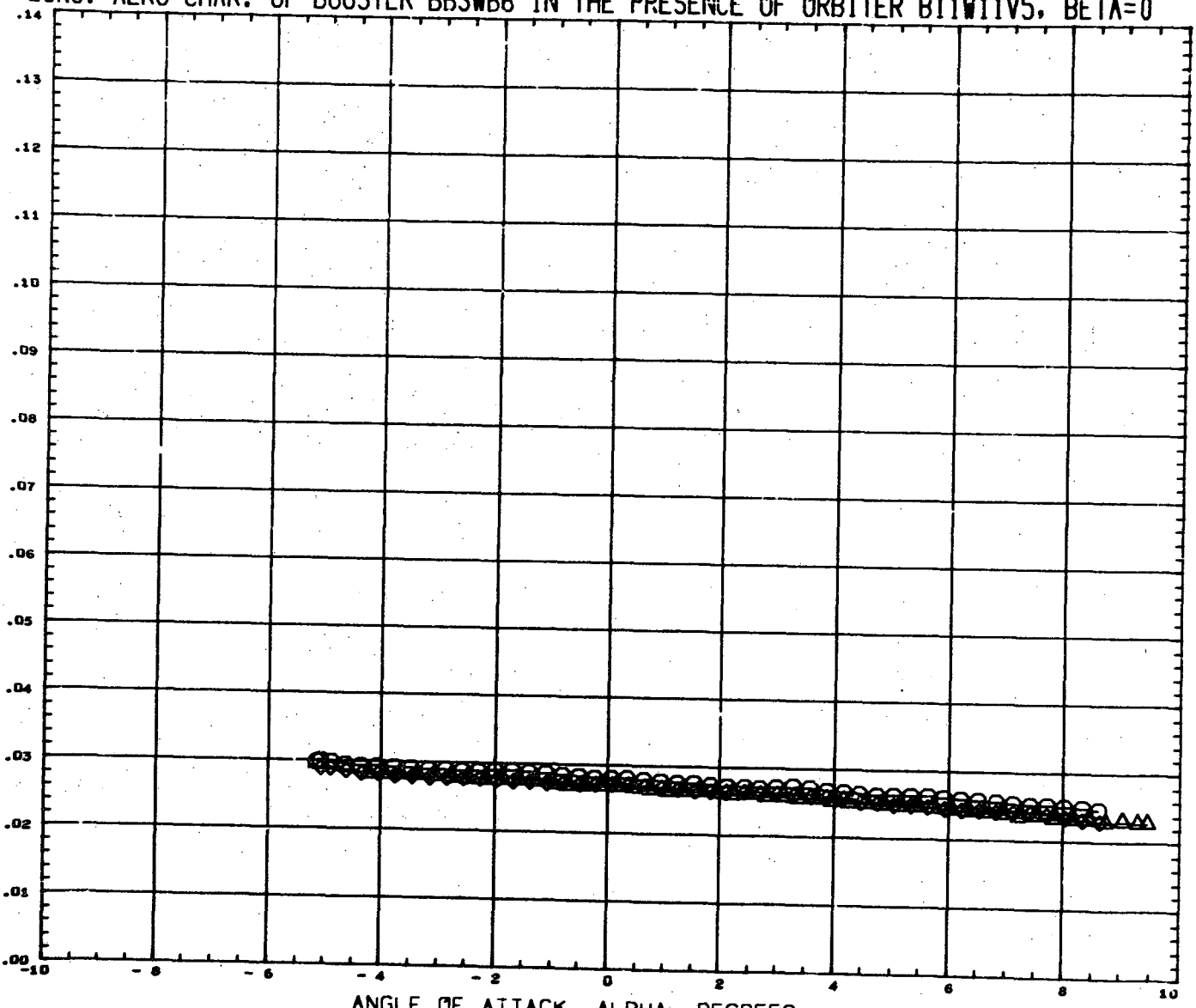
BETA	-	0.009	MACH		0.590
ALFB	-	5.114	BETB	-	0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



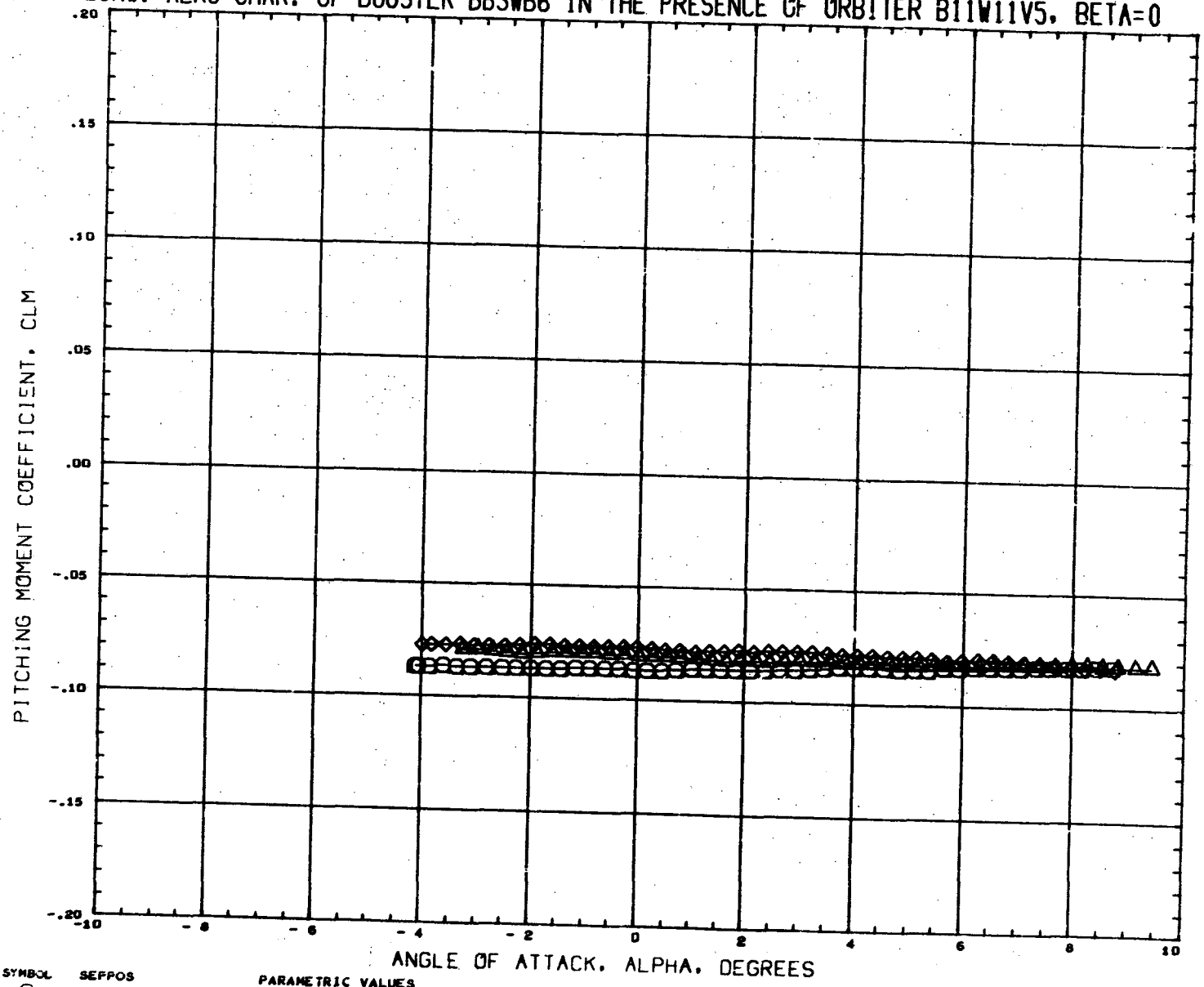
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.010	BETA	- 0.009	MACH	0.590	
△	0.011	ALPB	- 5.114	BETB	- 0.007	
◇	0.012					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8590	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



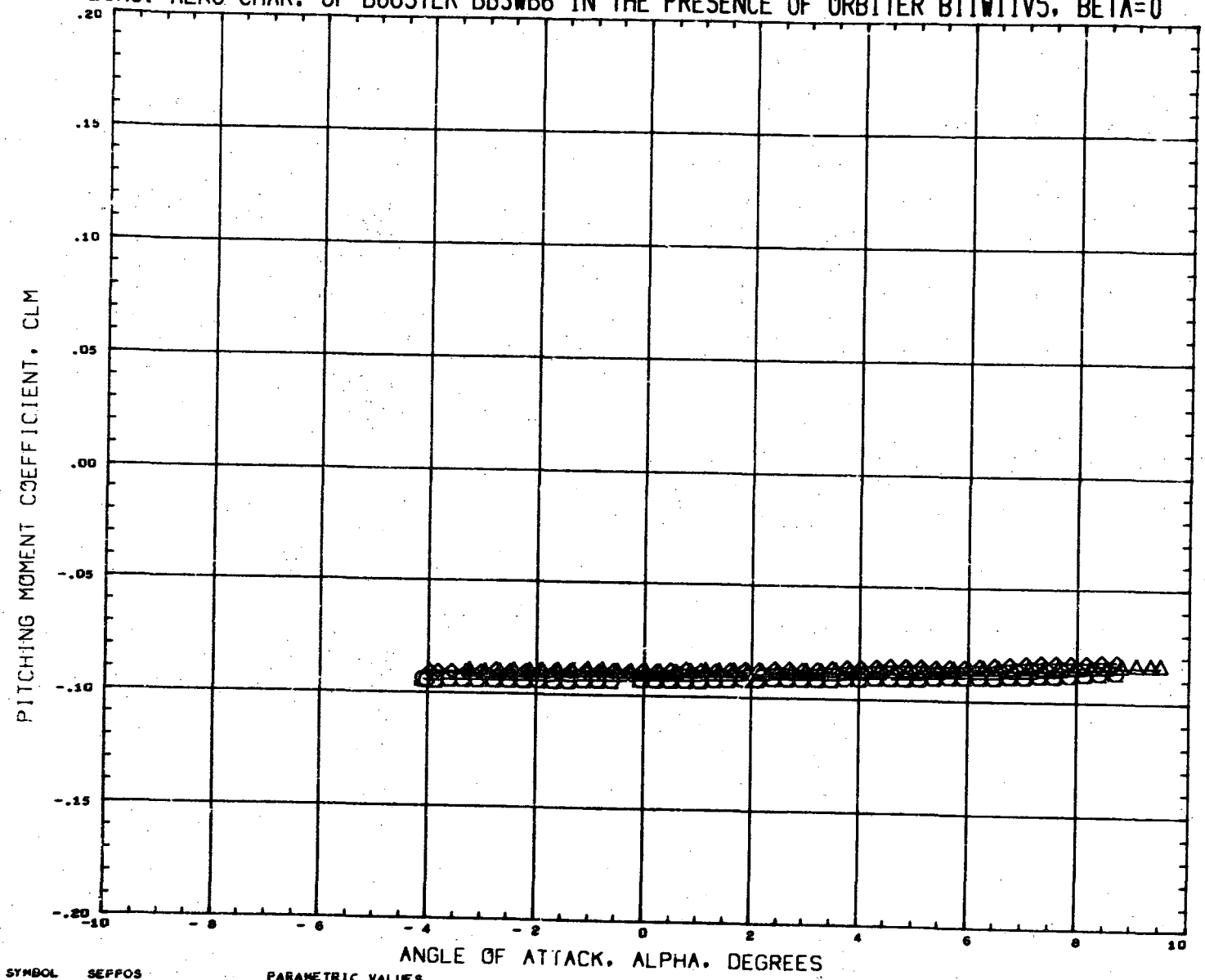
SYMBOL	SEFPOS		PARAMETRIC VALUES		
○	0.004	BETA	0.119	MACH	0.600
△	0.005	ALPB	3.772	BETB	- 0.006
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	.0.0088	

LØNG. AERØ CHAR. ØF BØØSTER BB3WB6 IN THE PRESENCE ØF ØRBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

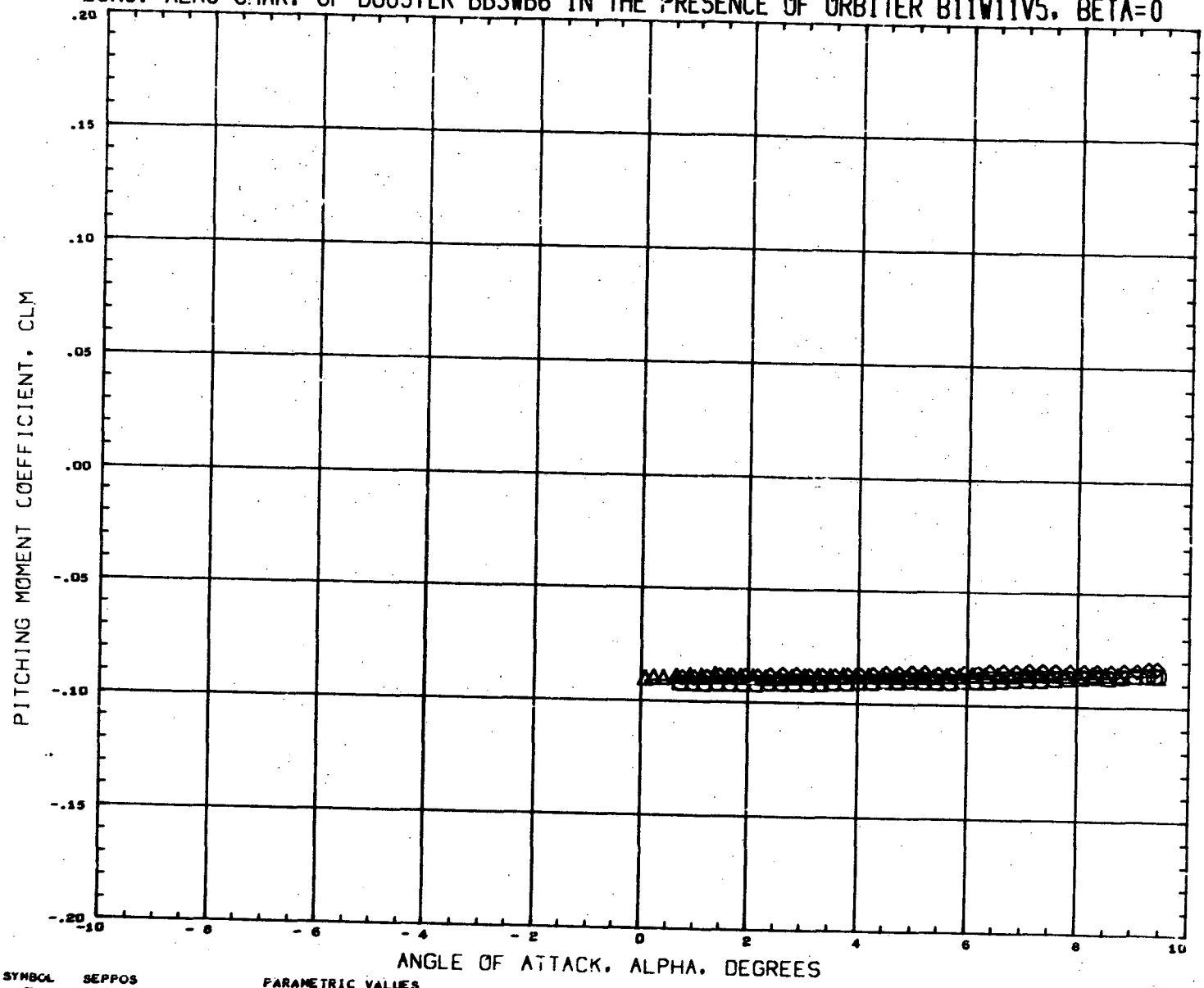
BETA	0.119	MACH		0.600
ALPB	3.772	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

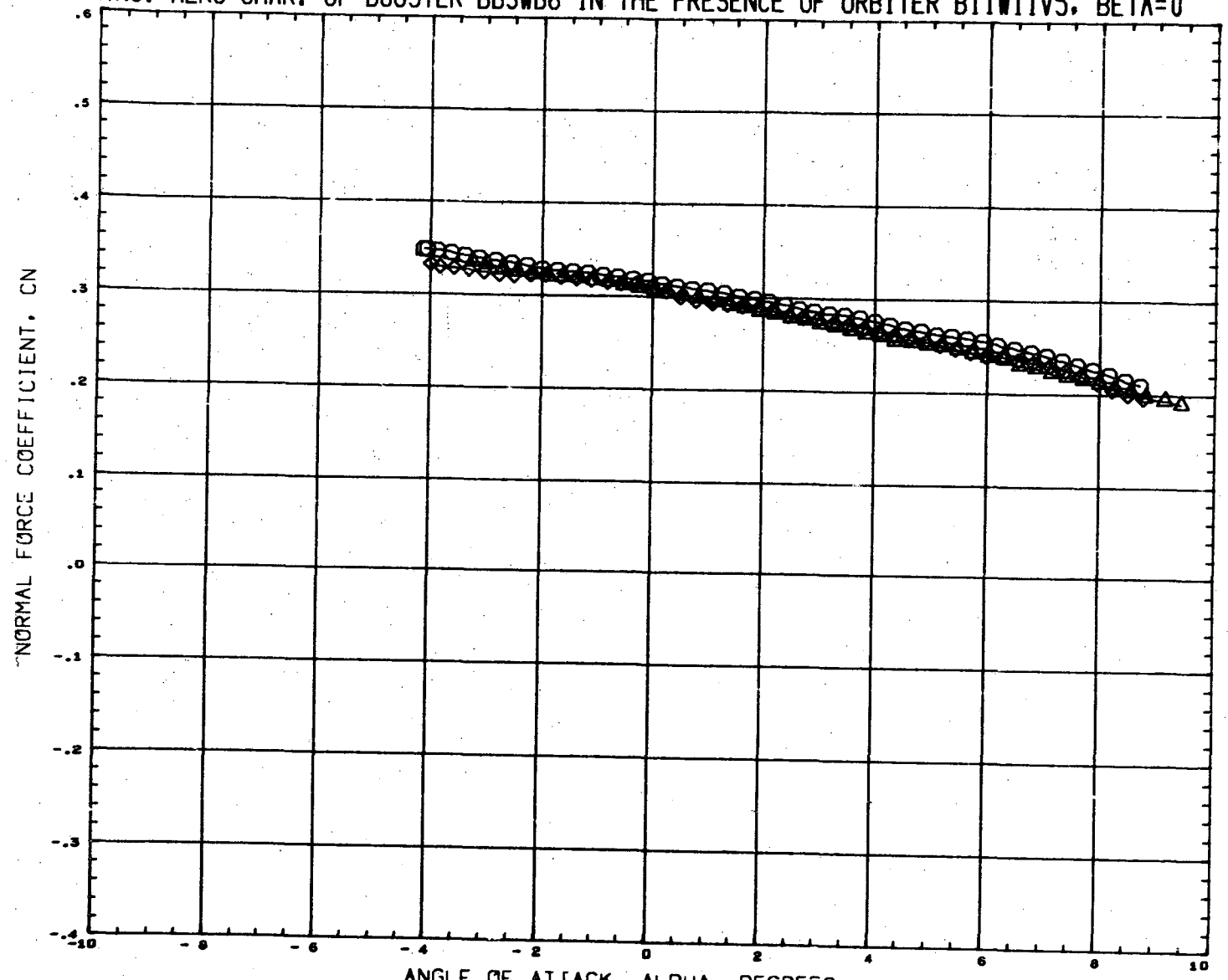
BETA	0.119	MACH		0.600
ALPB	3.772	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

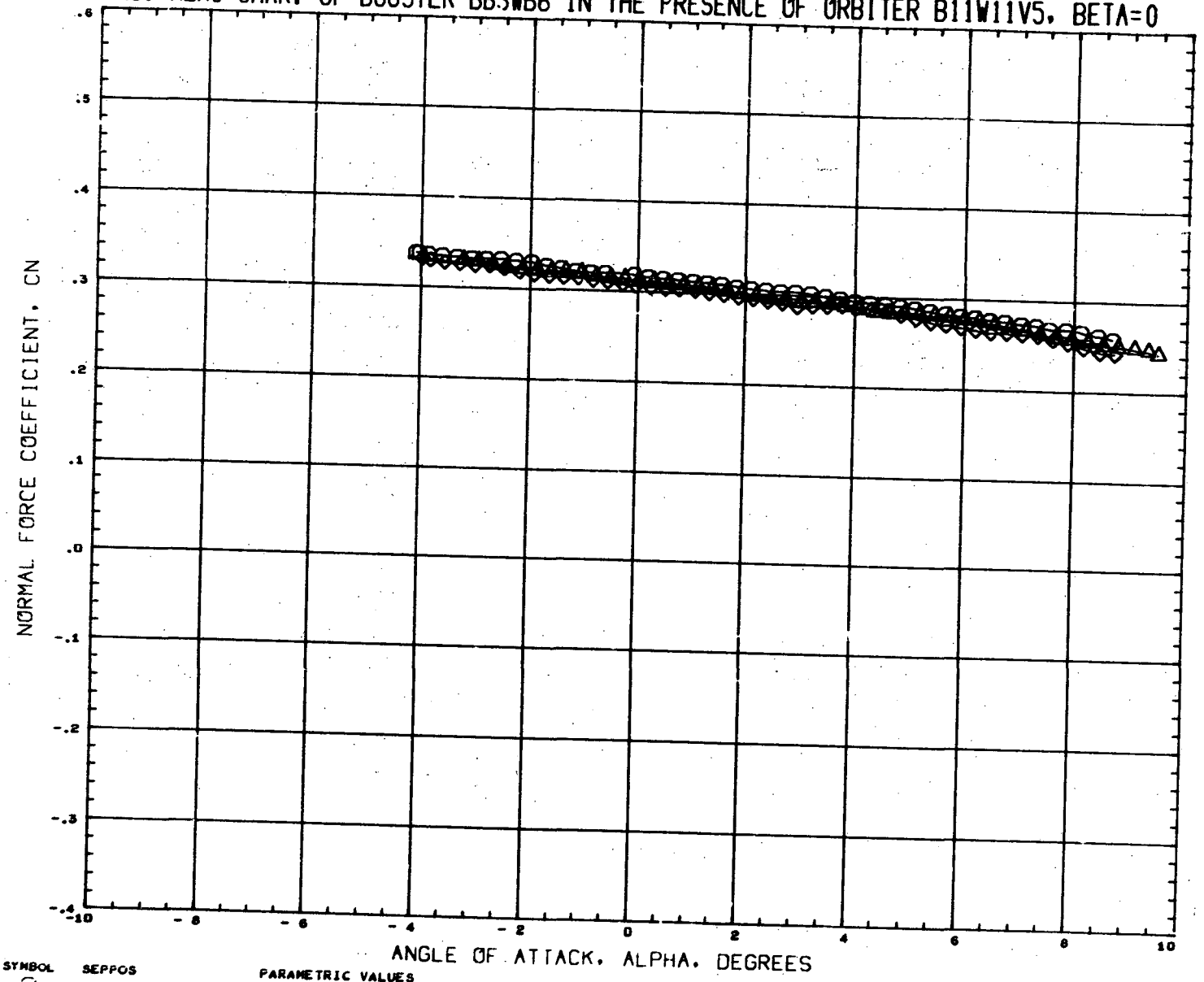
BETA	0.119	MACH		0.600
ALPB	3.772	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



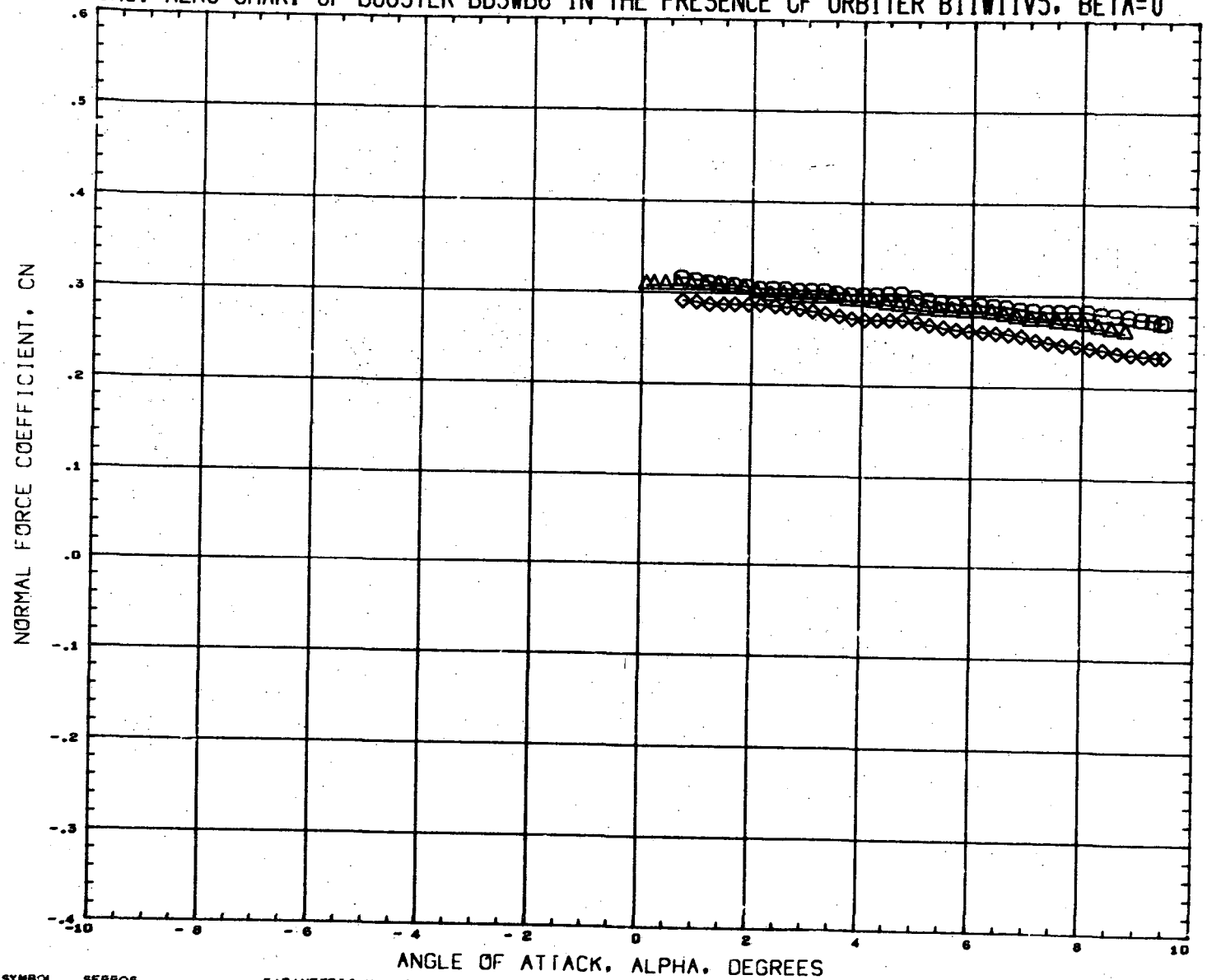
SYMBOL	SEPPOS		PARAMETRIC VALUES		
△	0.007	BETA	0.119	MACH	0.600
◇	0.008	ALFB	3.772	BETB	- 0.006
	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

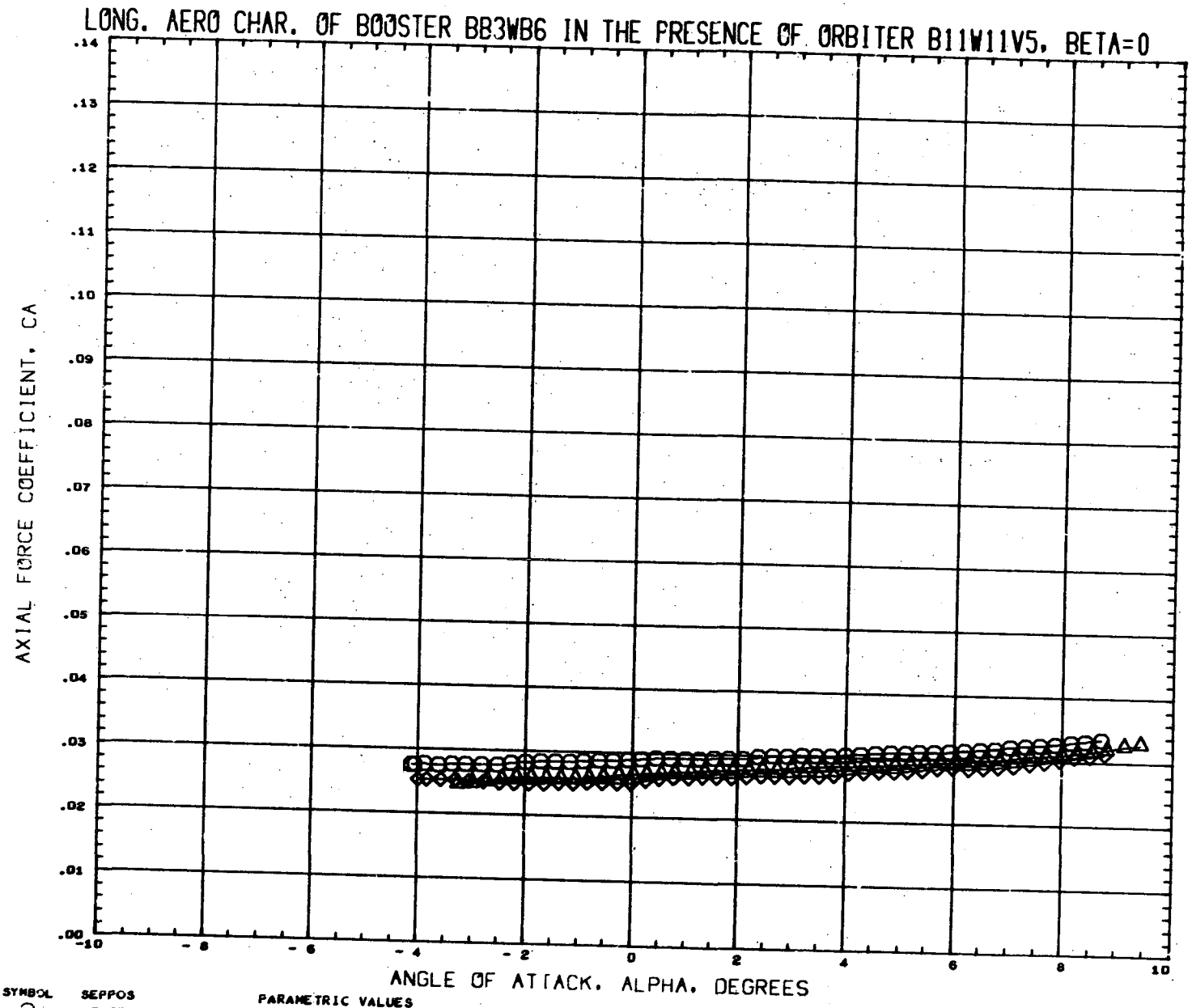
PARAMETRIC VALUES

BETA	0.119	MACH	0.600
ALPB	3.772	BETB	- 0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000



SYMBOL	SEPPOS		PARAMETRIC VALUES		
○	0.004	BETA	0.119	MACH	0.600
△	0.005	ALPB	3.772	BETB	- 0.006
◇	0.006				

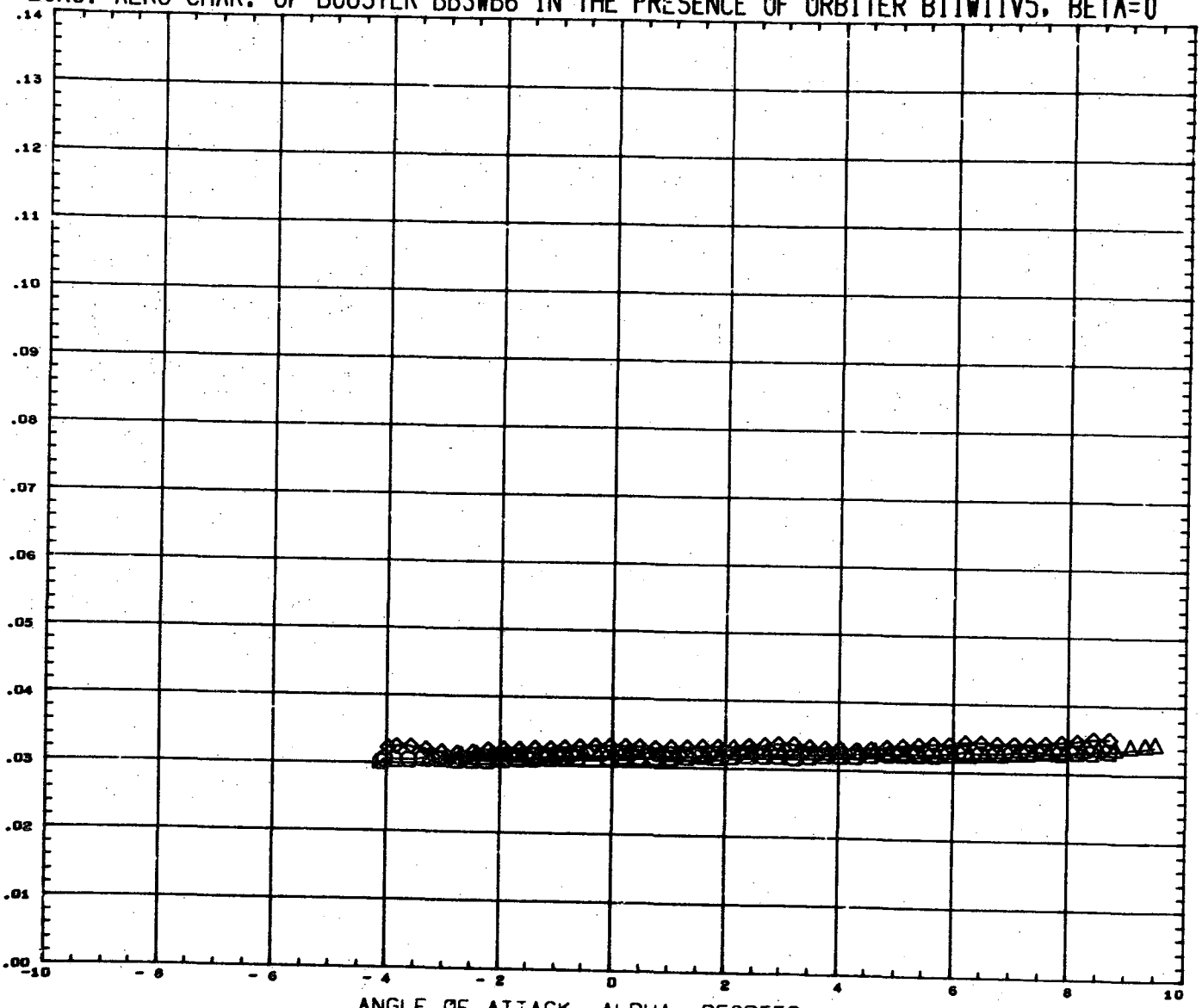
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU079) 21 JUN 71 PAGE 148

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



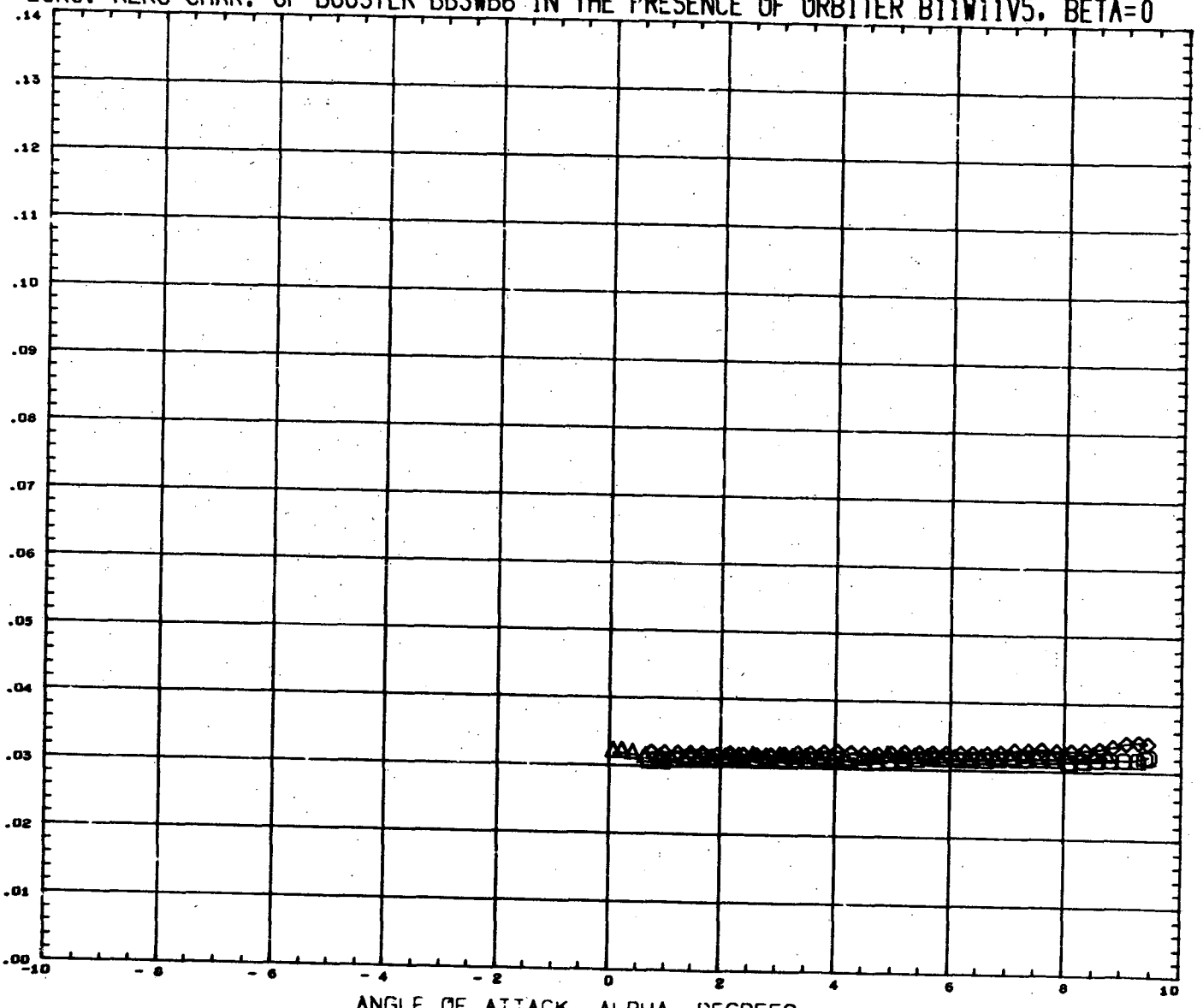
SYMBOL	SEPPOS		PARAMETRIC VALUES		
☐	0.007	BETA	0.119	MACH	0.600
△	0.008	ALPB	3.772	BETB	- 0.006
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.010
▷	0.011
○	0.012

PARAMETRIC VALUES

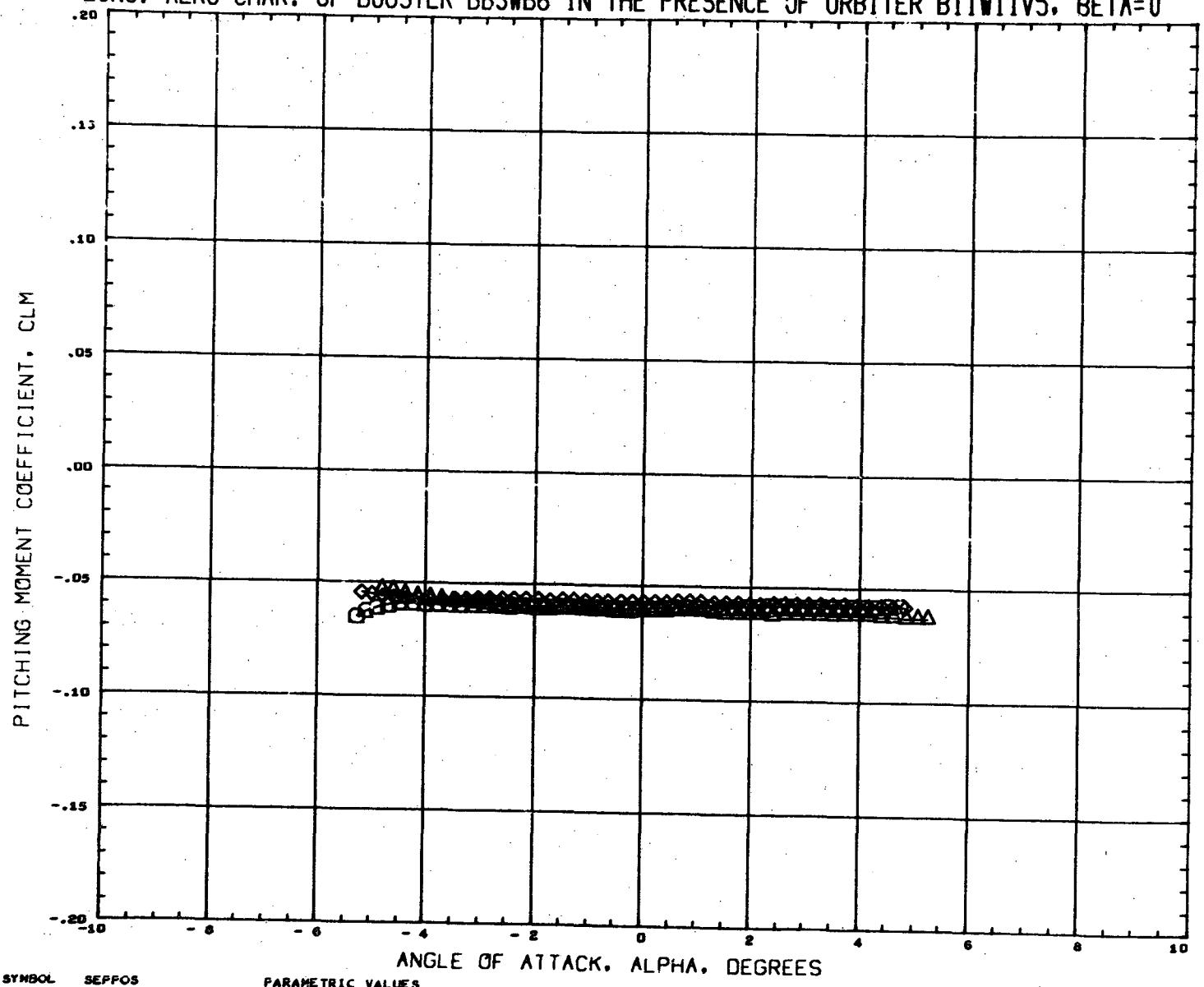
BETA	0.119	MACH	0.600
ALPB	3.772	BETB	- 0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

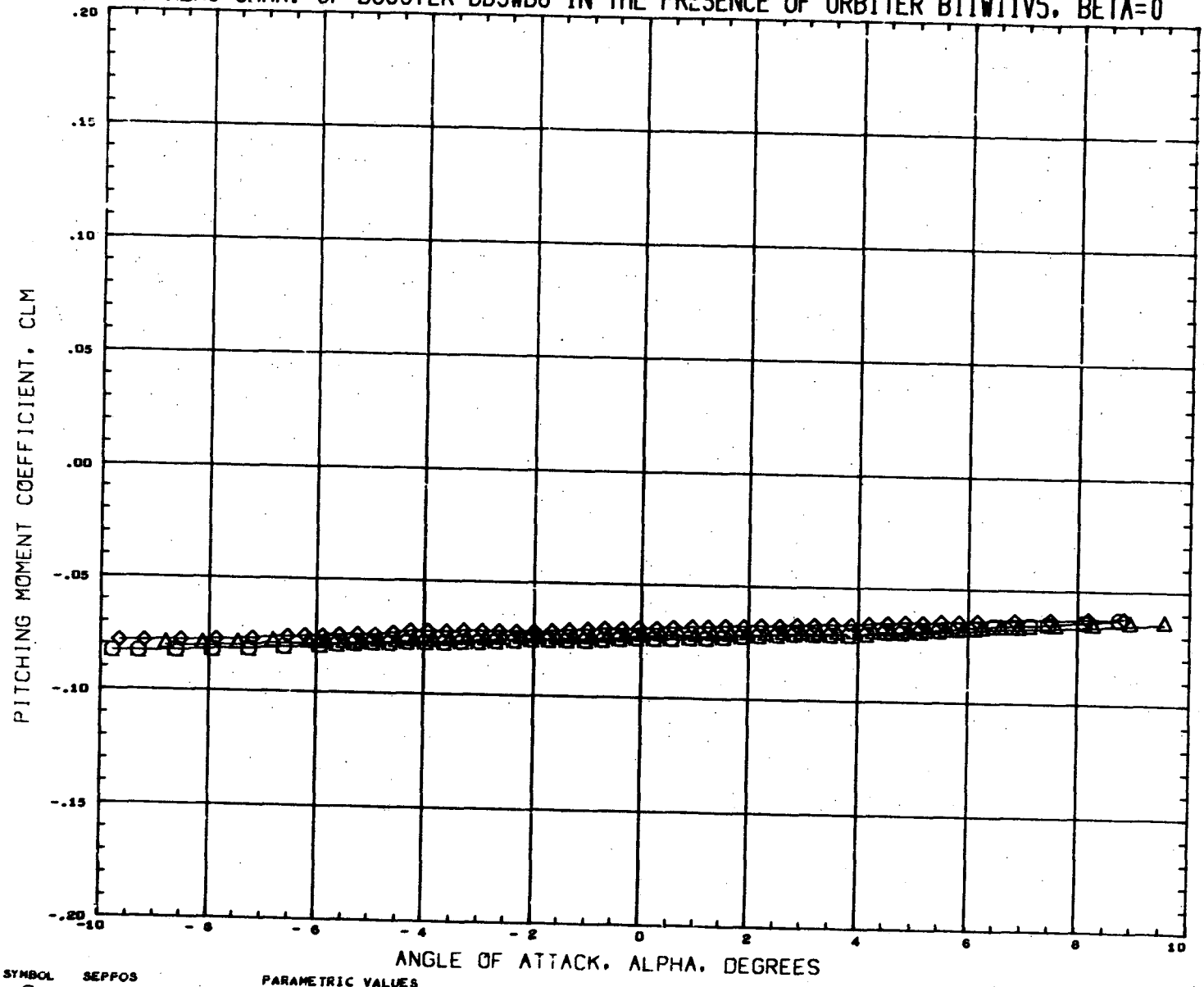
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

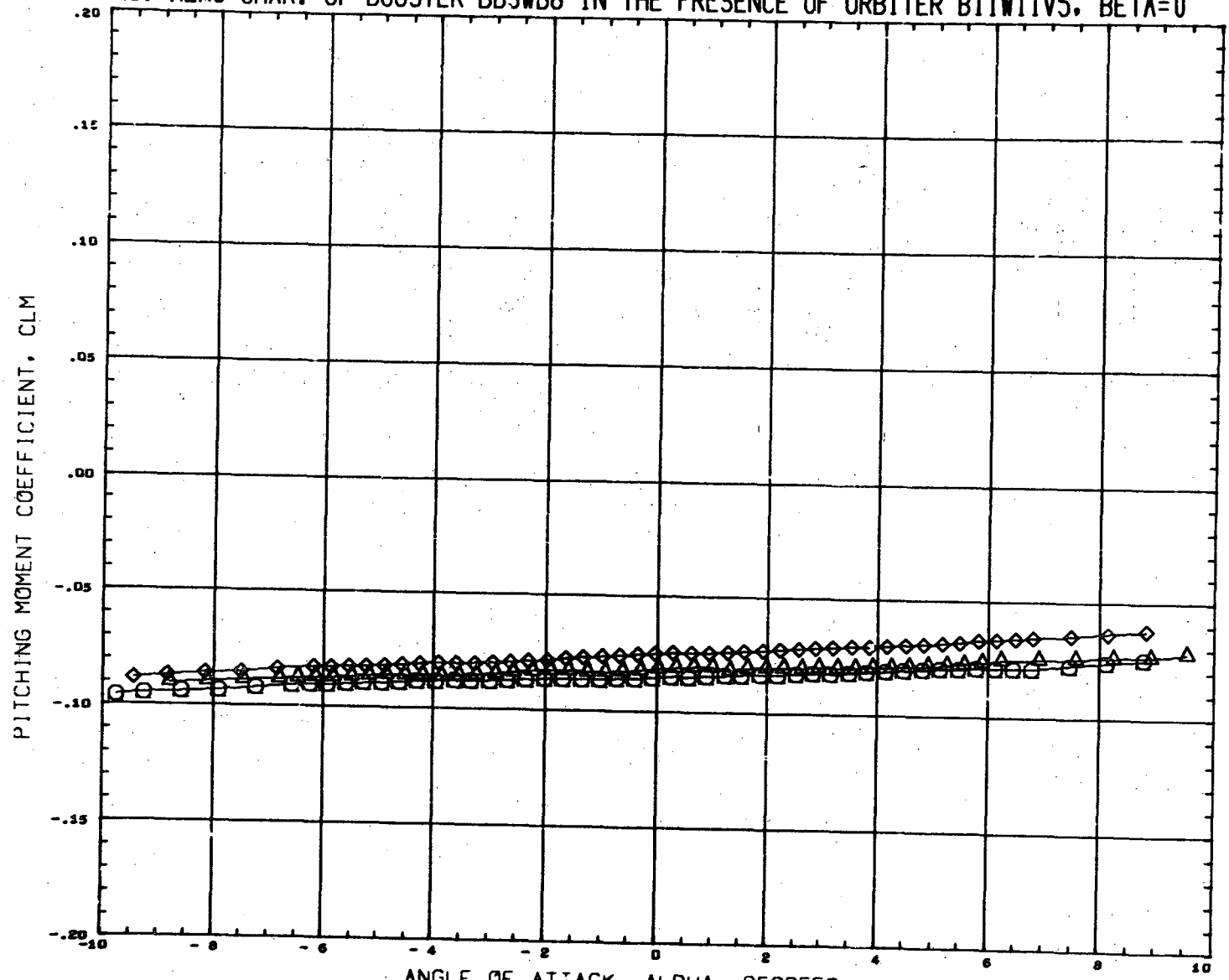
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

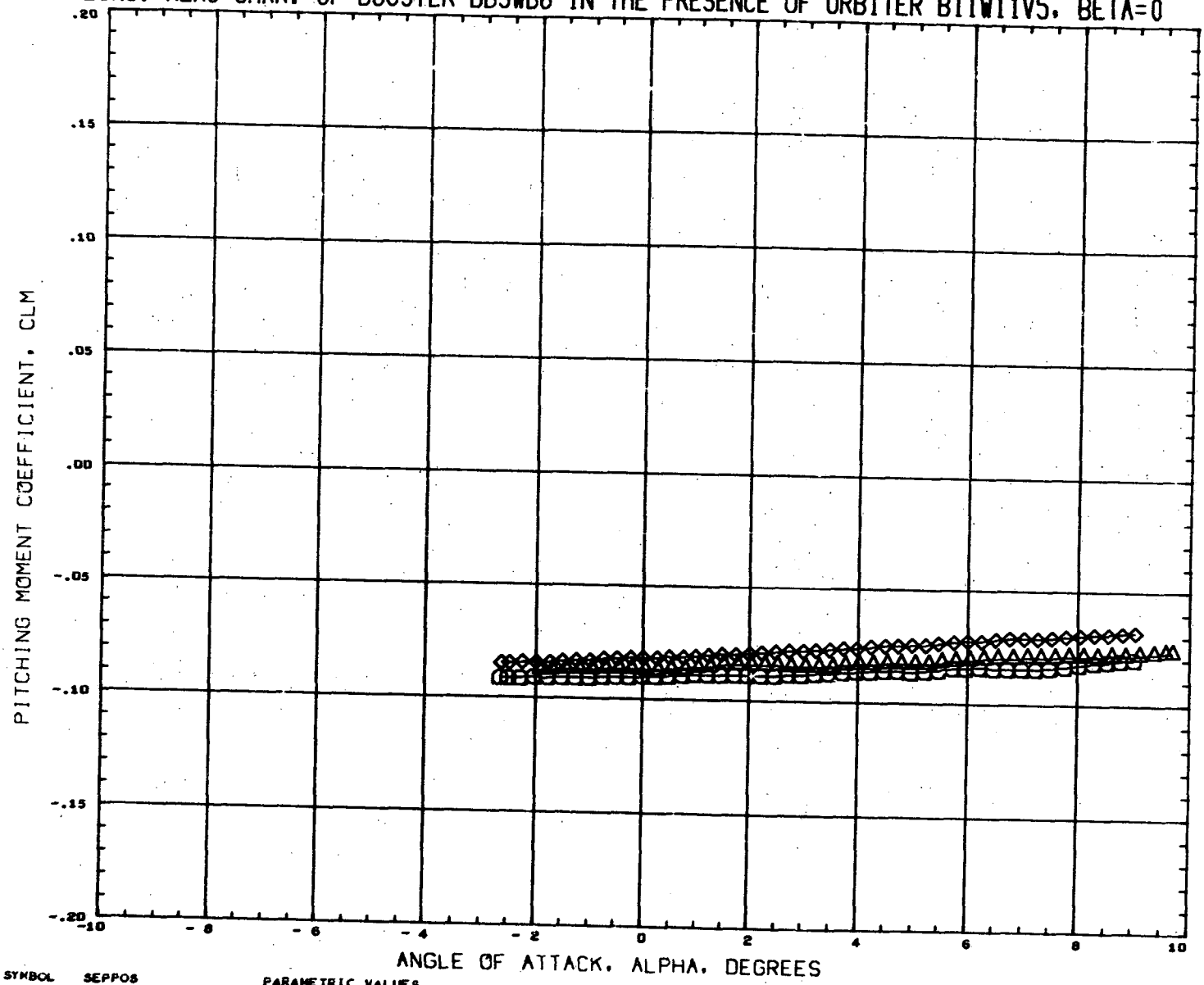
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8950	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇△○	0.010
	0.011
◇	0.012

PARAMETRIC VALUES

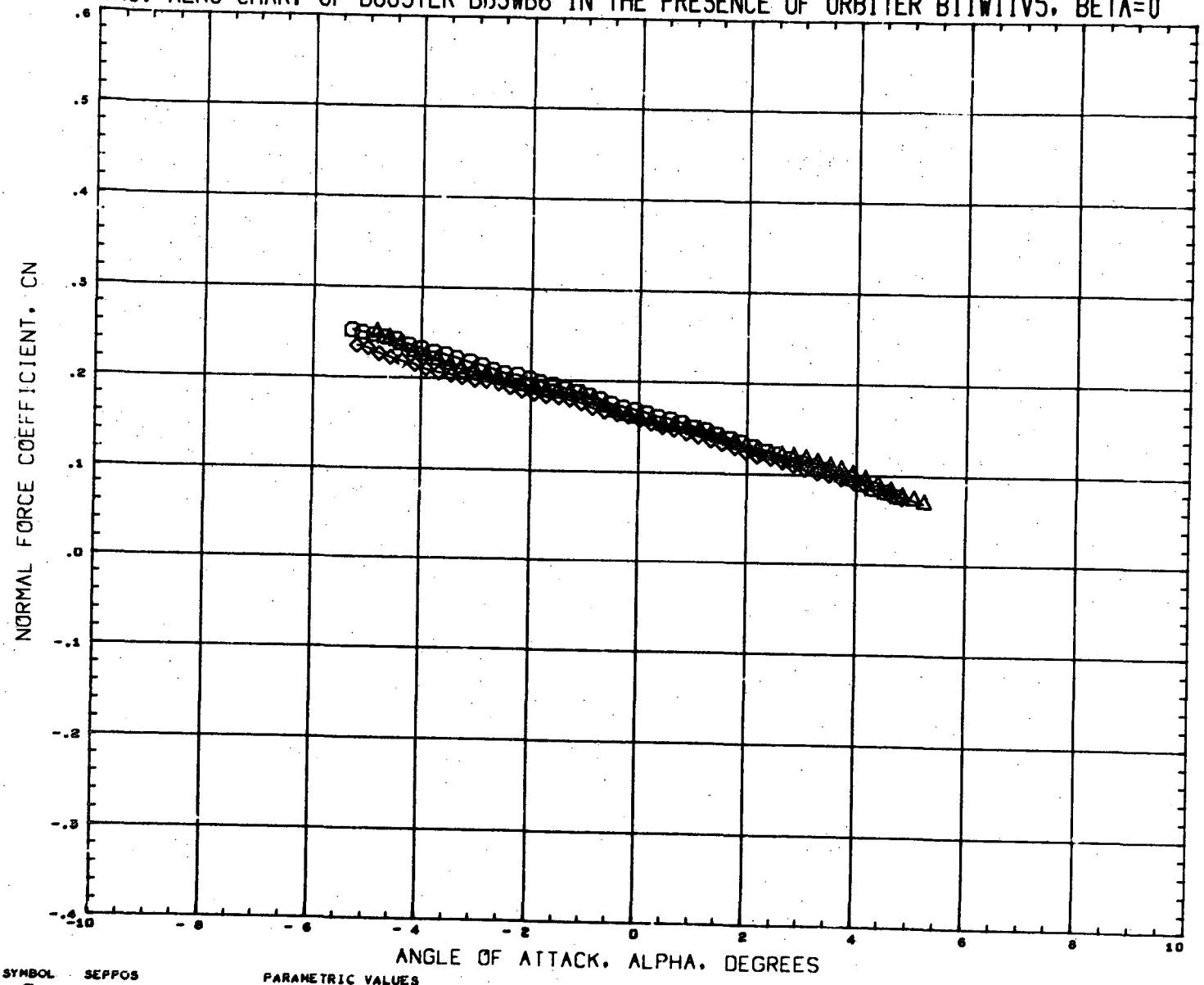
BETA	-	0.036	MACH		0.890
ALFB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.2740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



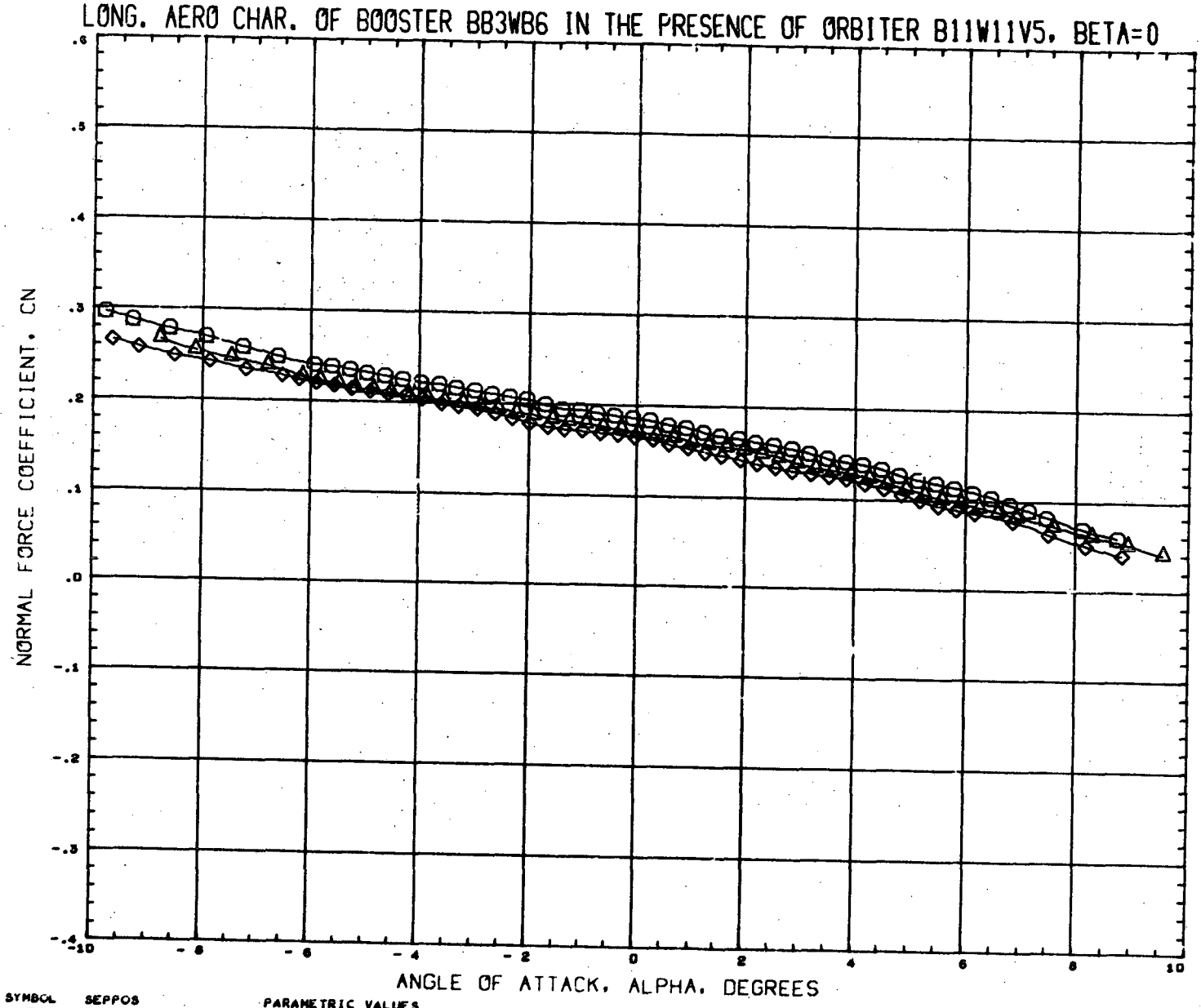
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.036	MACH	0.890	
△	0.002	ALPB	0.223	BETB	- 0.010	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU048) 21 JUN 71 PAGE 155



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

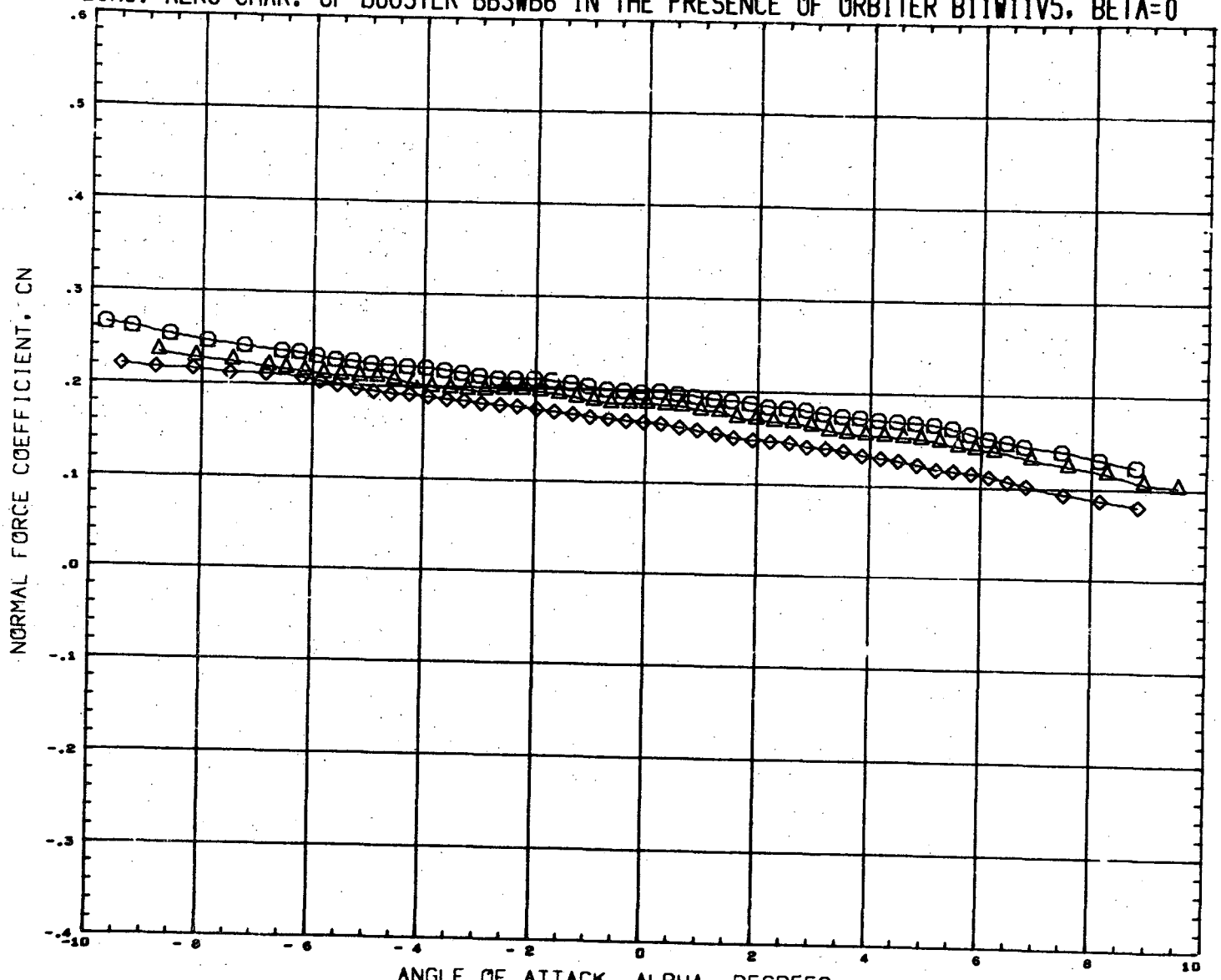
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

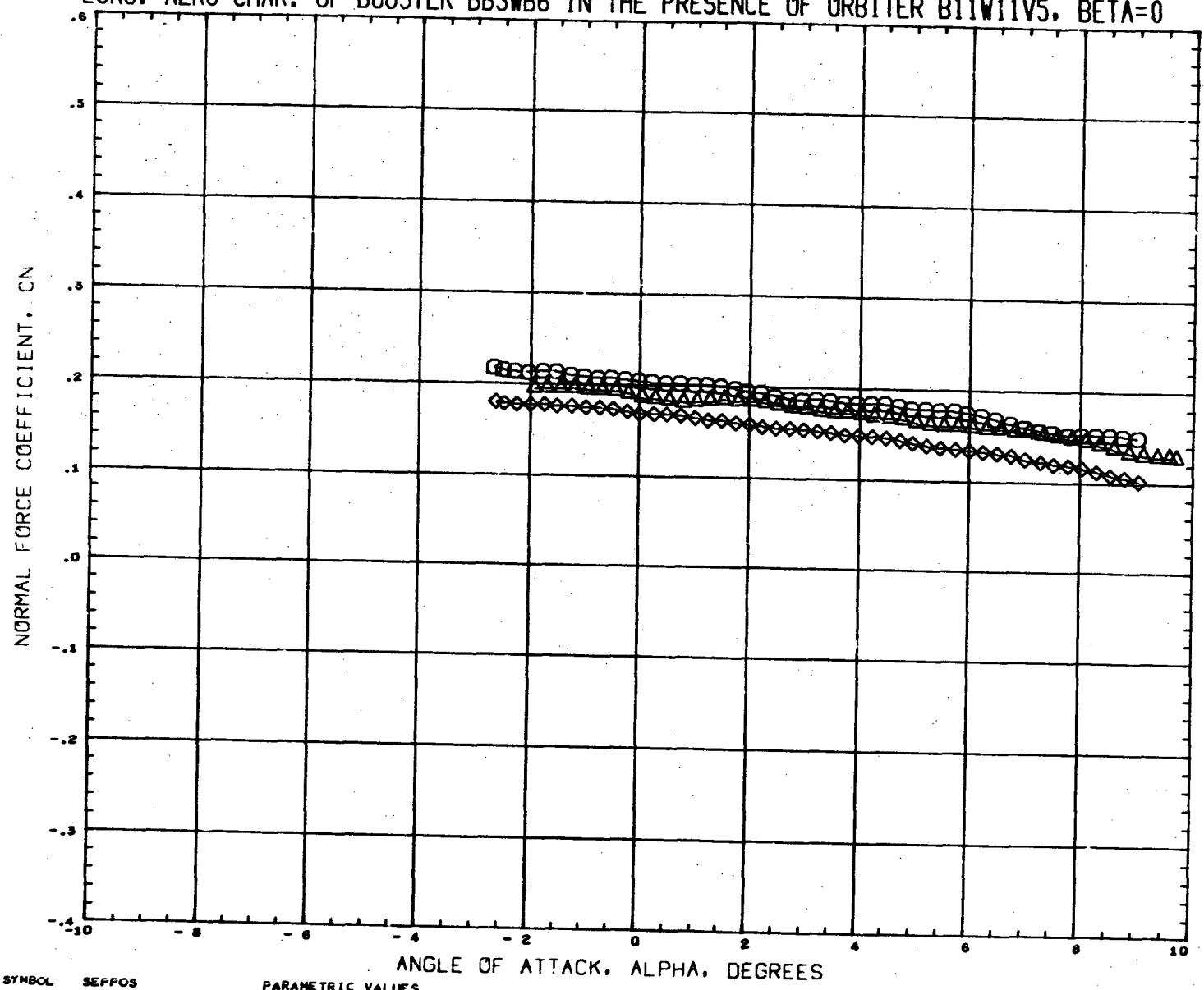
BETA	- 0.036	MACH		0.890
ALPB	0.223	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8950	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

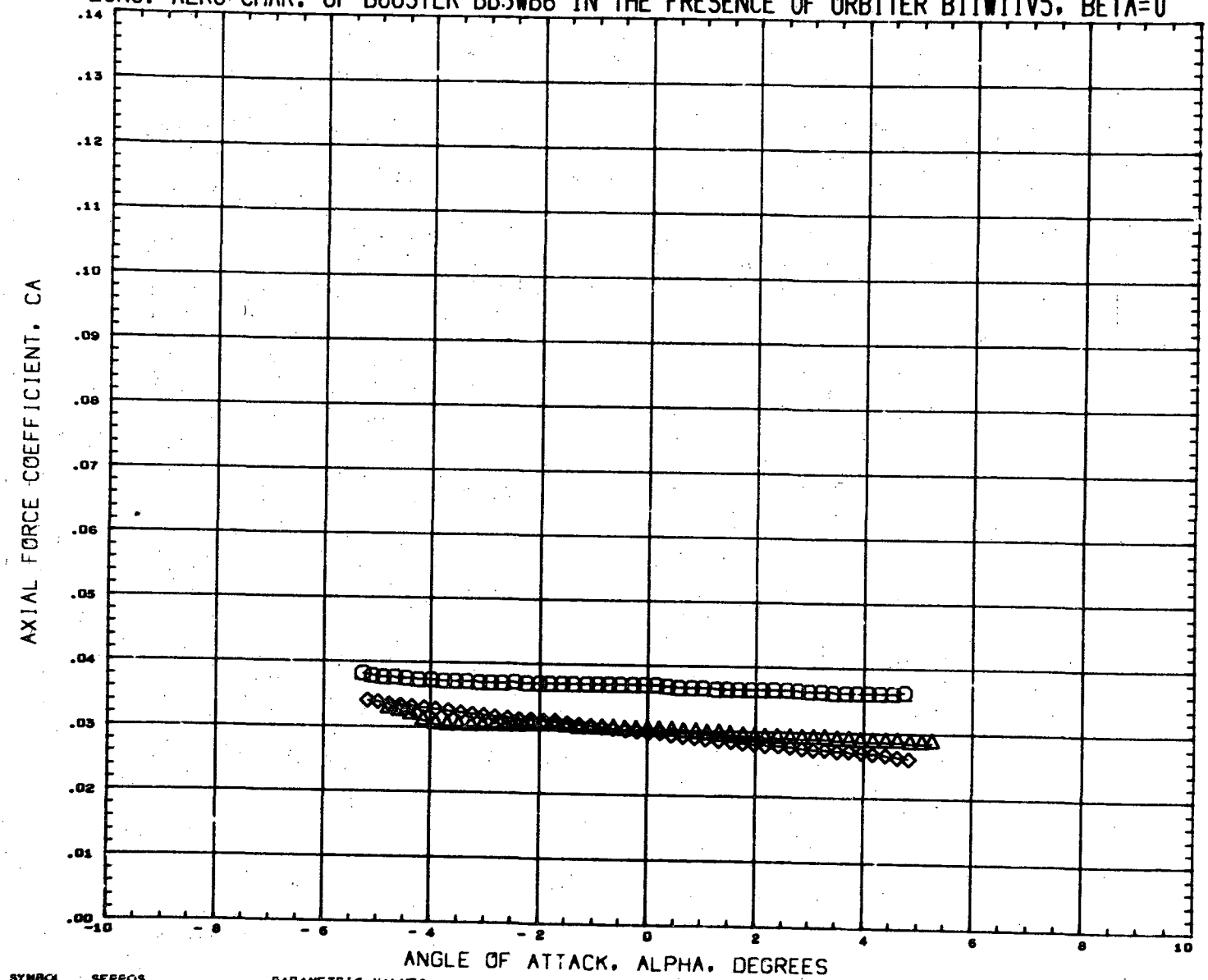
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8900	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

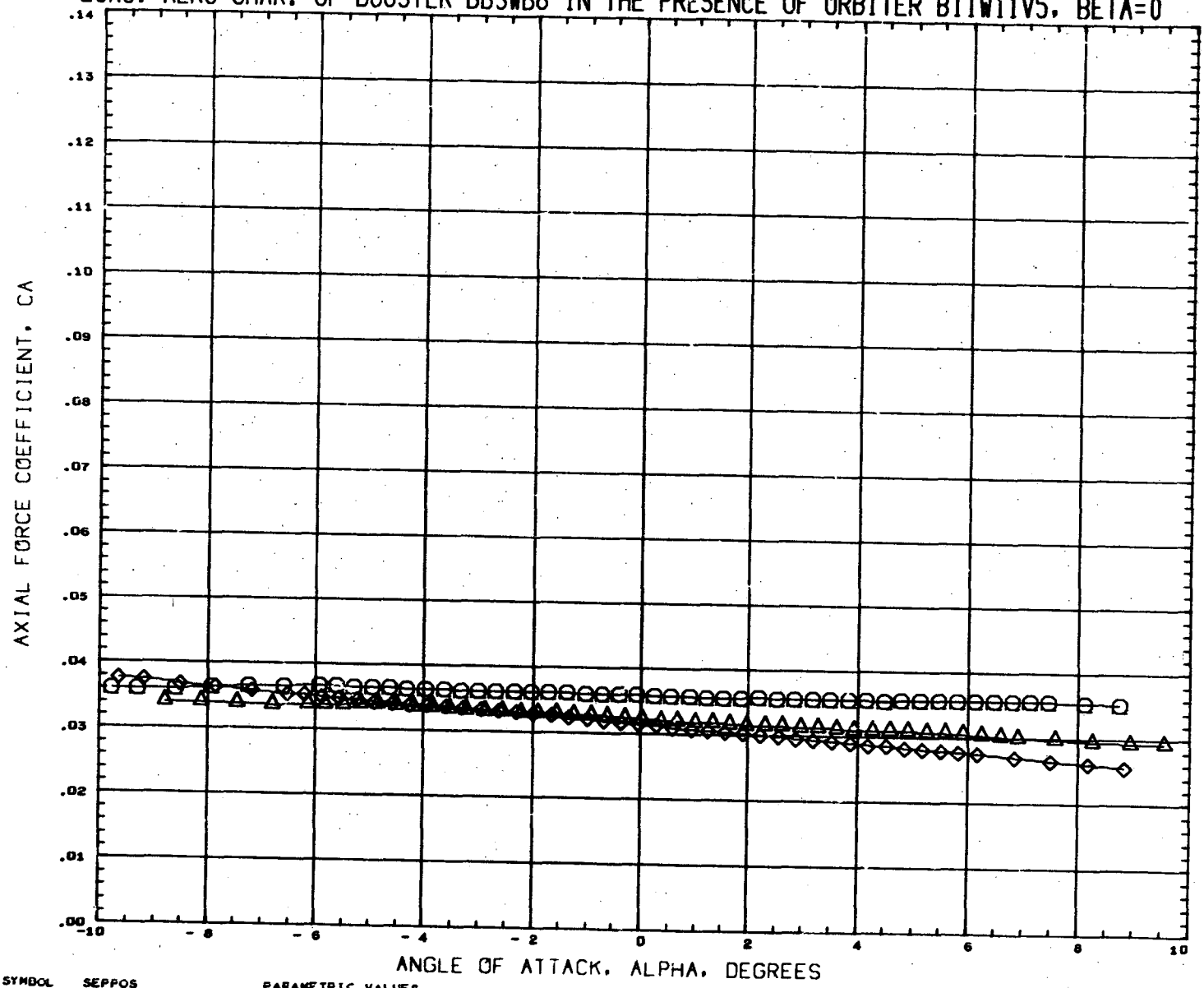
BETA	-	0.036	MACH		0.890
ALPB		0.223	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

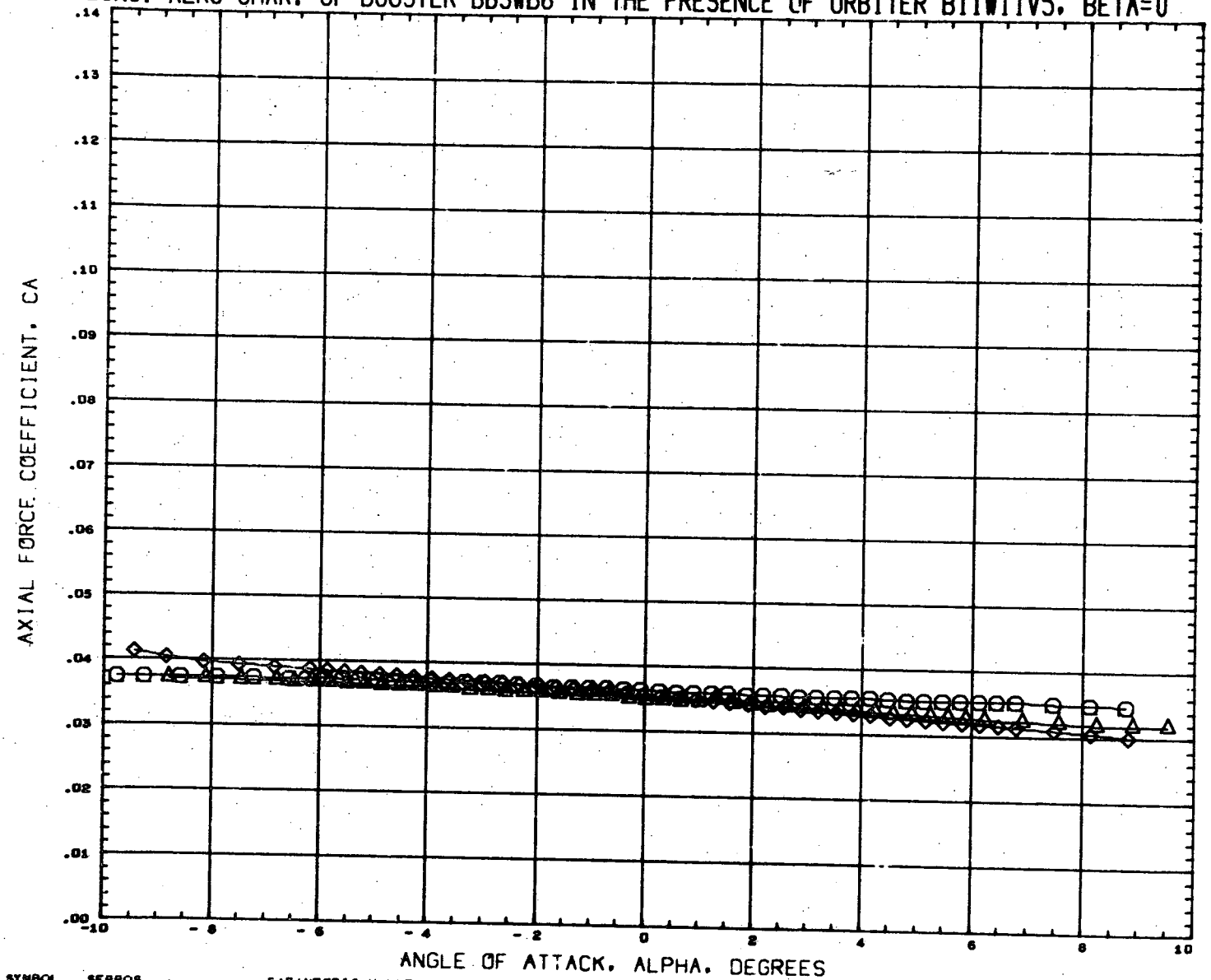
BETA	- 0.036	MACH	0.890
ALPB	0.223	BETB	- 0.010

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



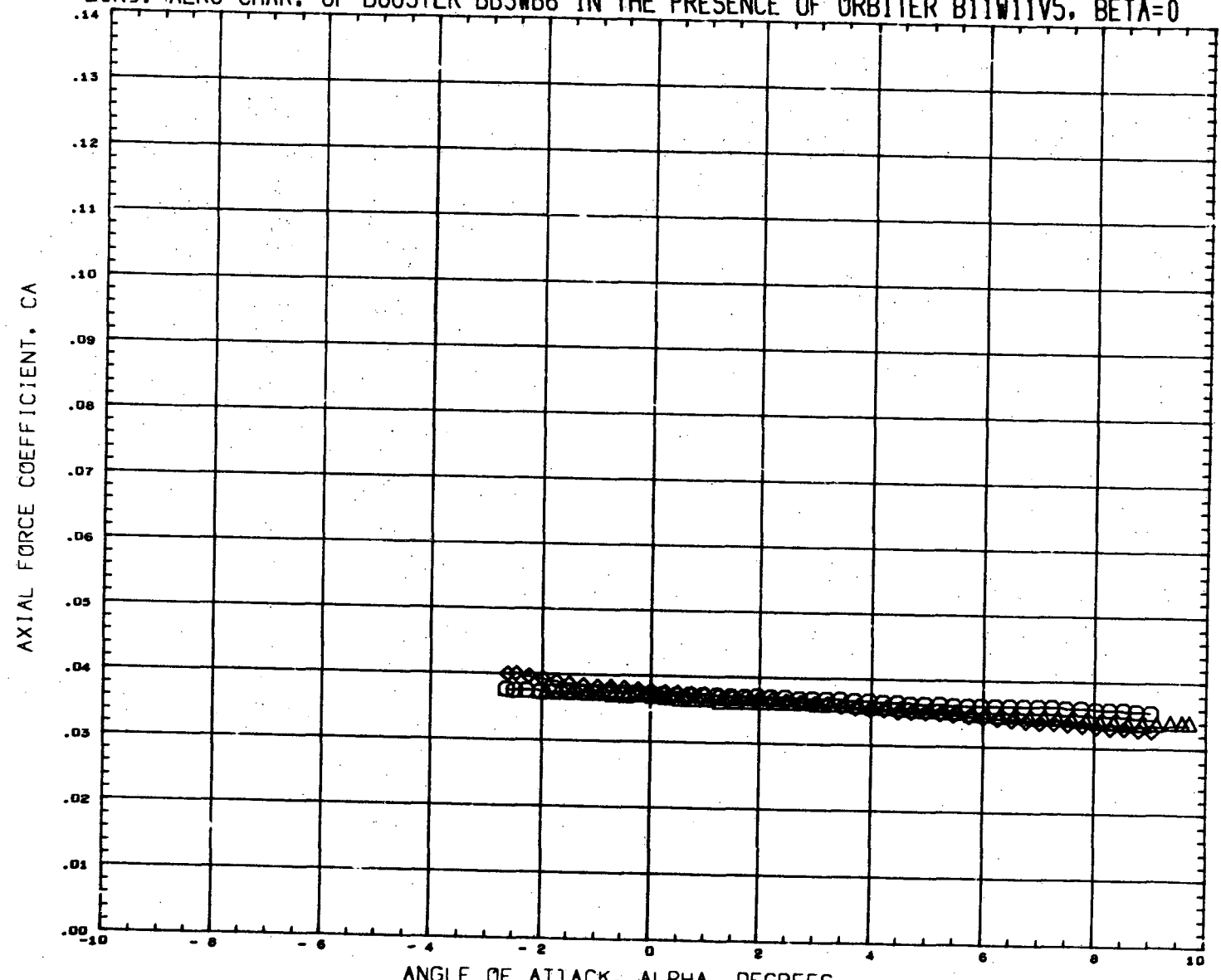
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.036	MACH	0.890	
△	0.008	ALPB	0.223	SETB	- 0.010	
◇	0.009					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8993	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

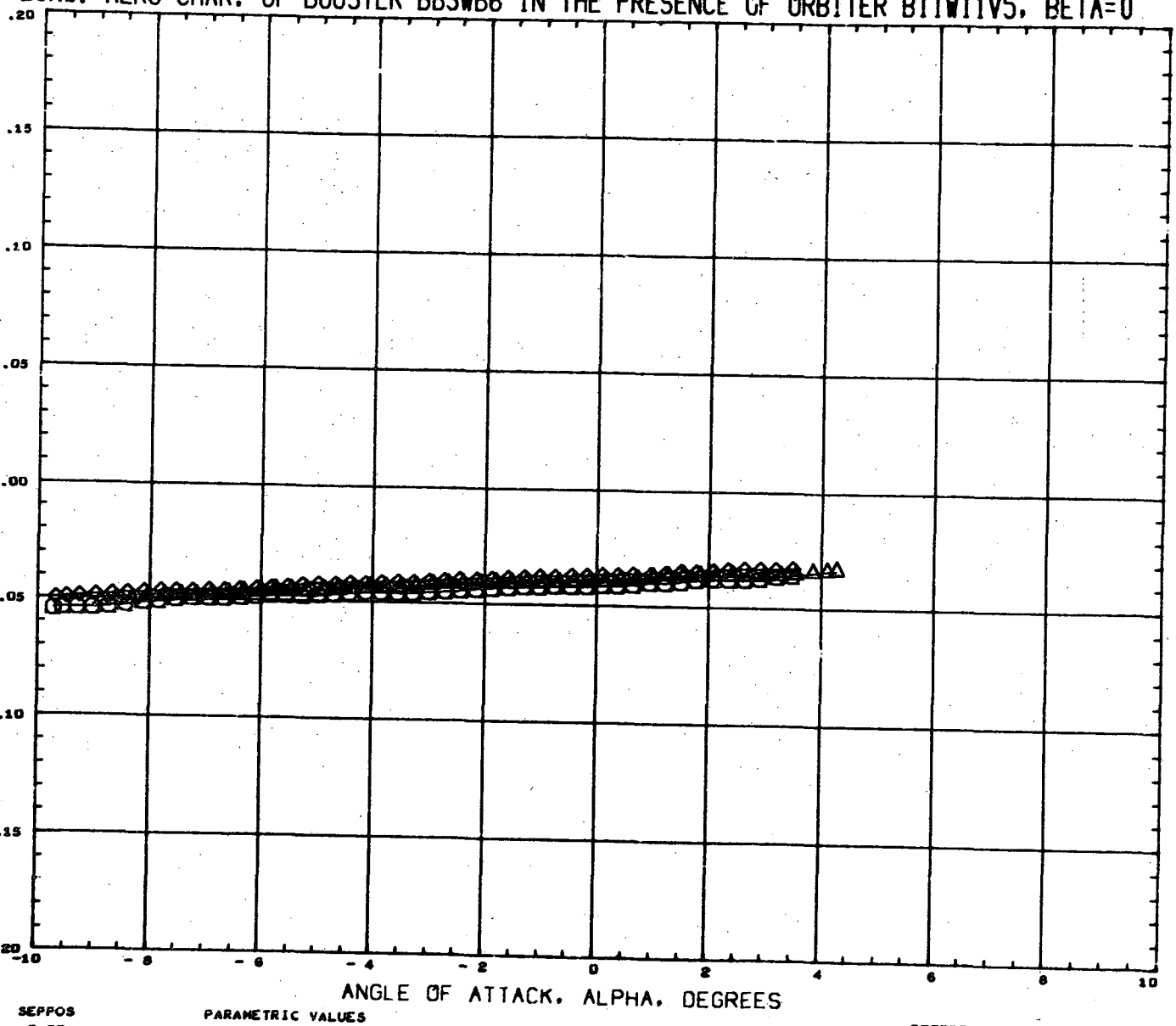
BETA	- 0.036	MACH	0.890
ALPB	0.223	BETB	- 0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

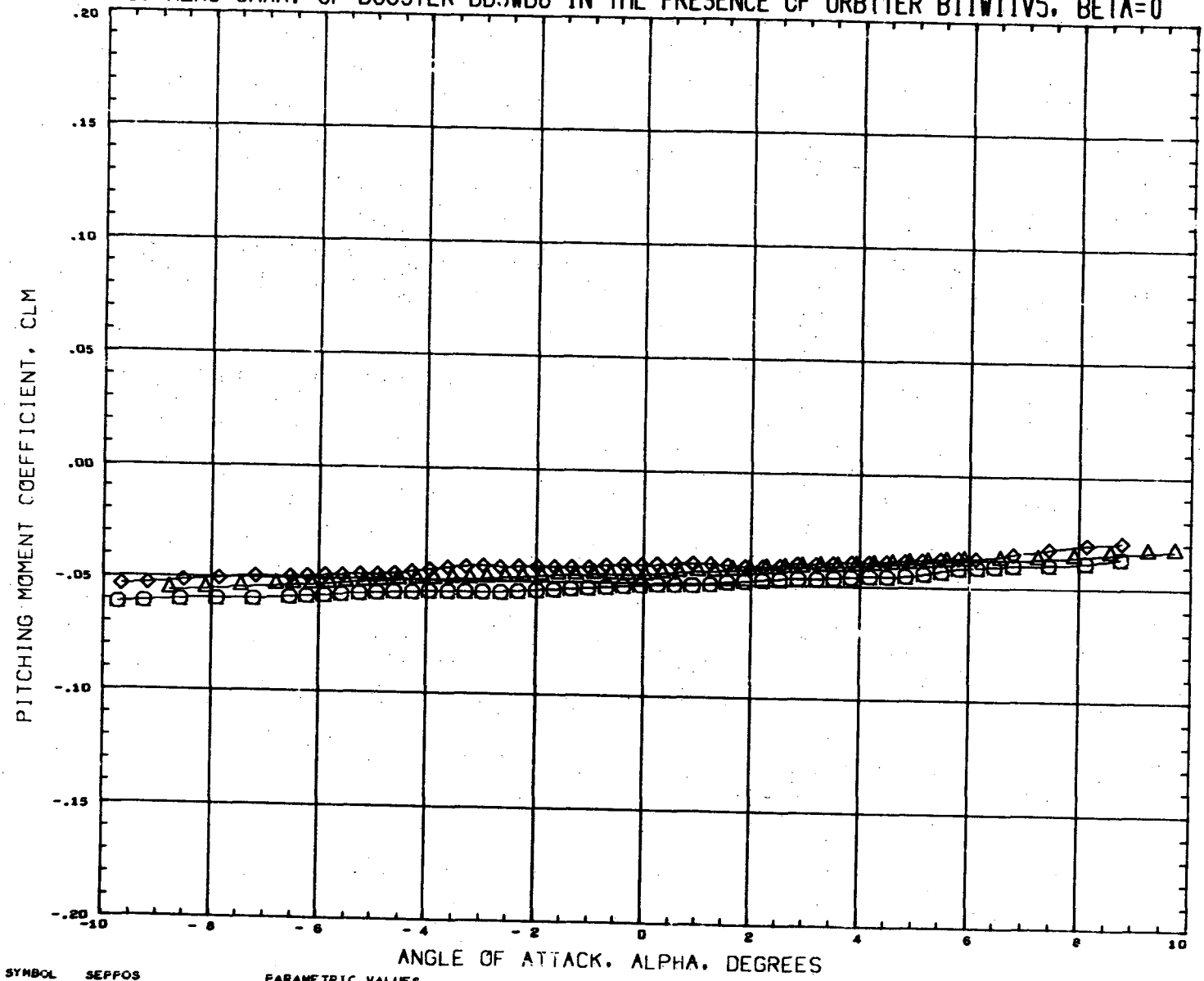
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3730	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

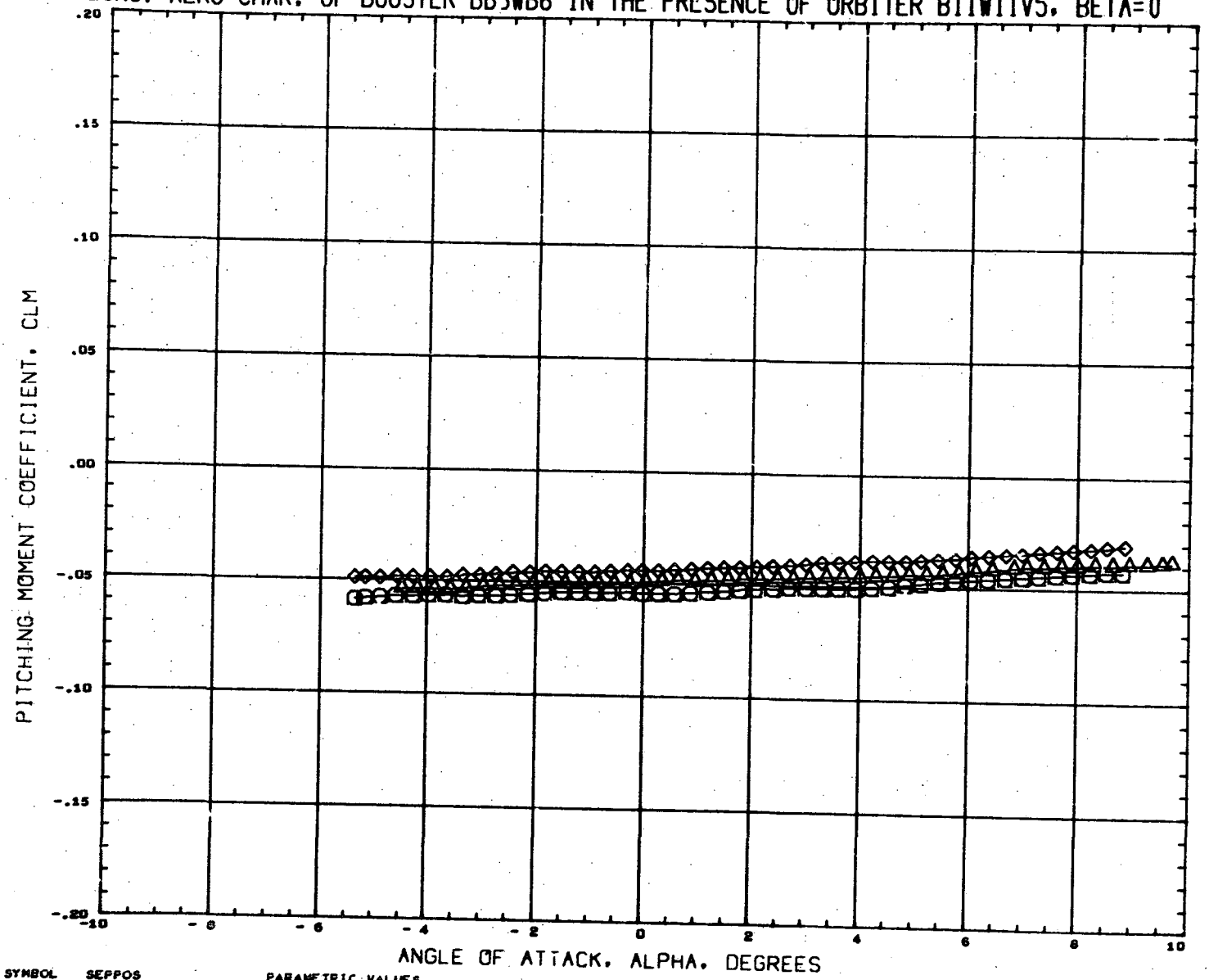
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

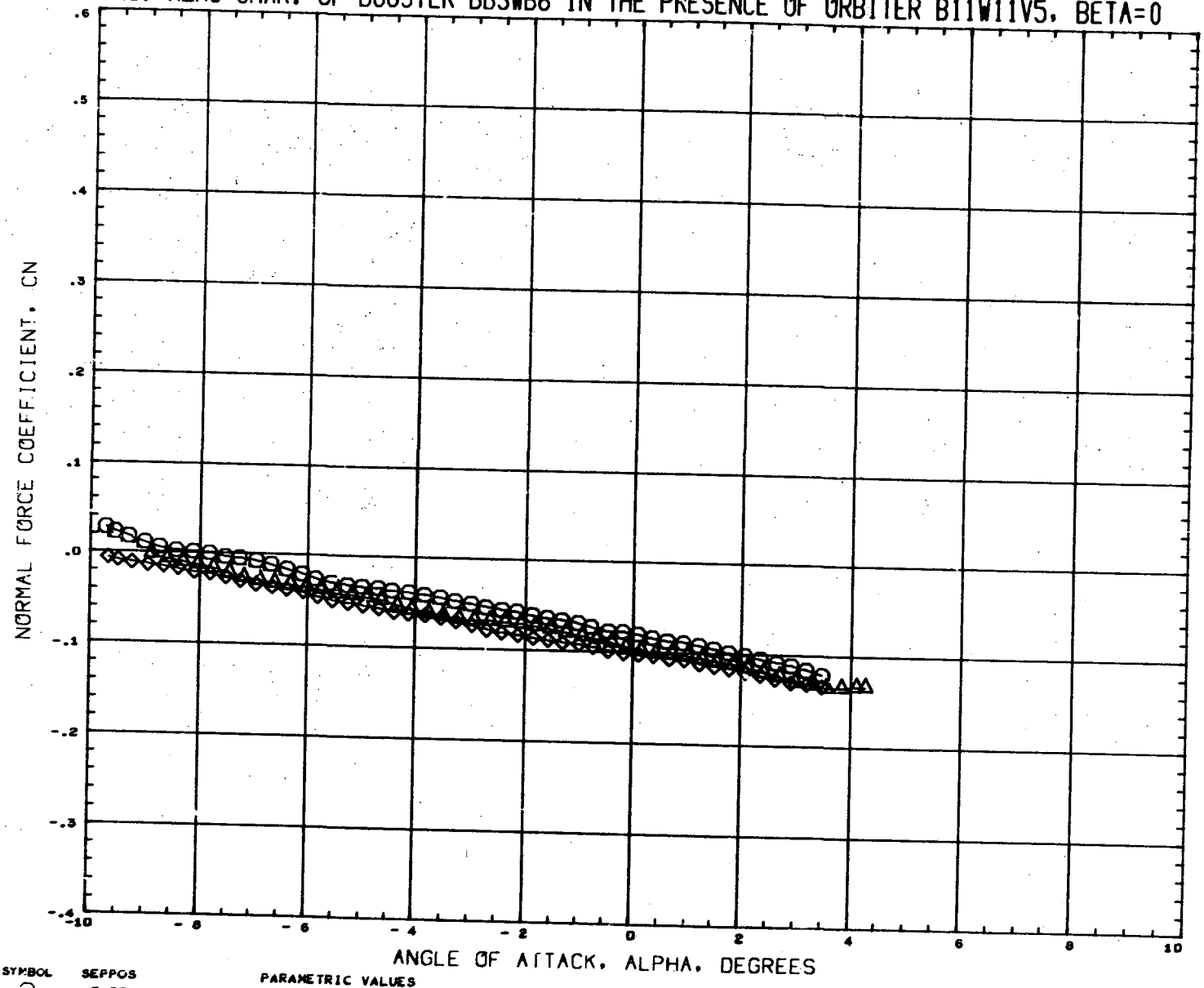
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU056) 21 JUN 71 PAGE 165

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇△○	0.004
	0.005
◇	0.006

PARAMETRIC VALUES

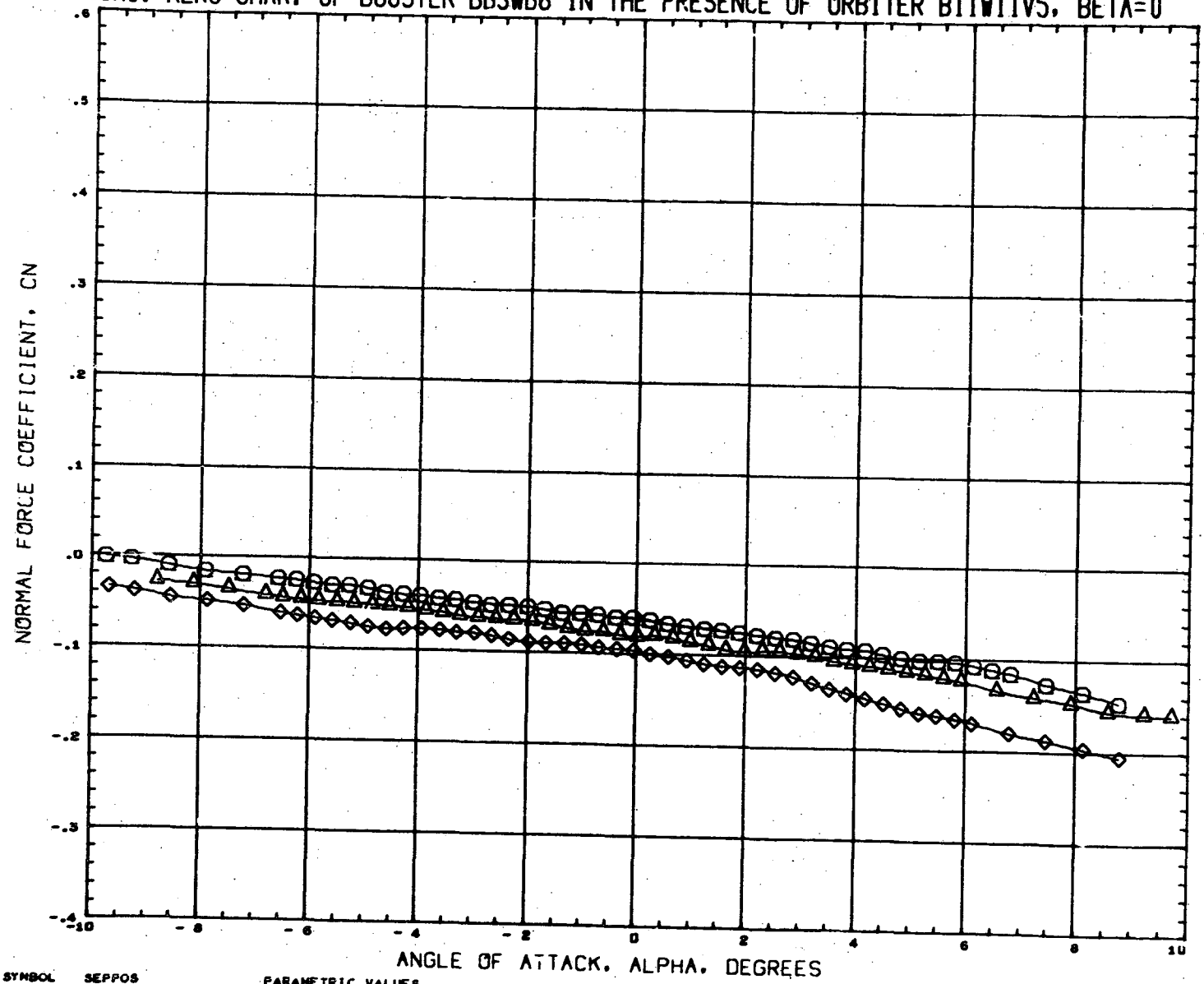
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

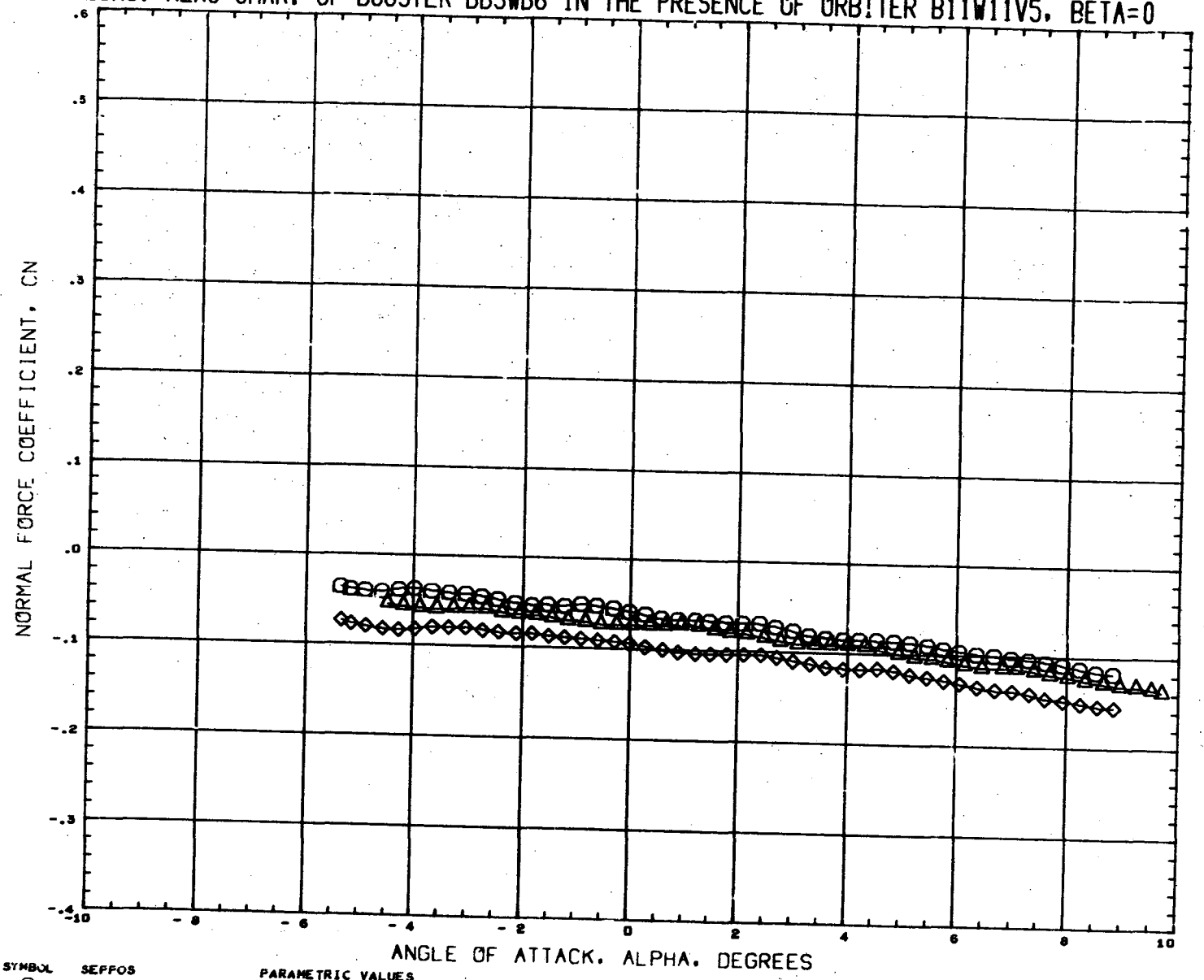
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFFOS
△	0.010
◇	0.011
	0.012

PARAMETRIC VALUES

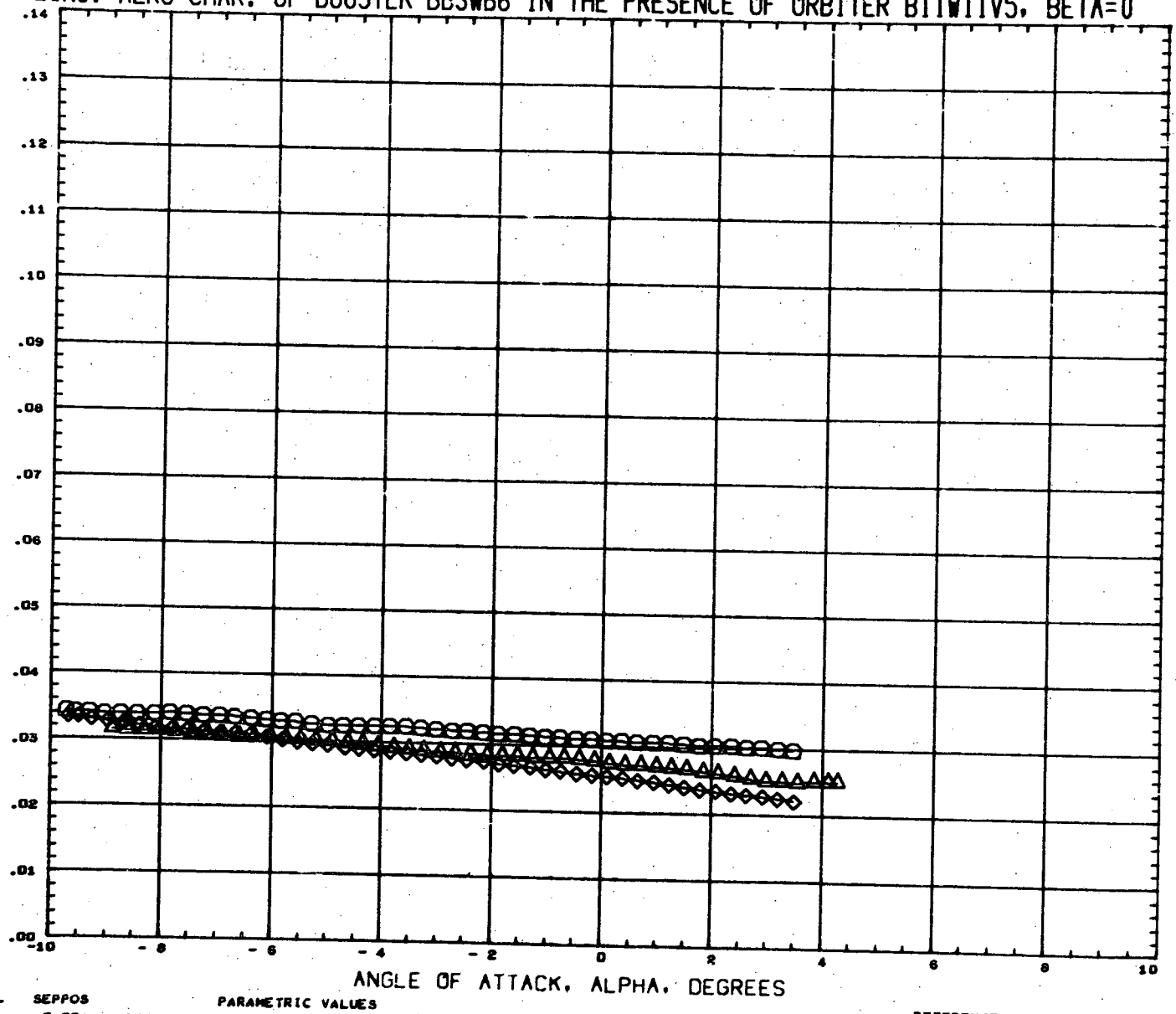
BETA	-	0.028	MACH		0.900
ALFB	-	5.224	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

BETA	-	0.028	MACH		0.900
ALPB	-	5.224	SETB	-	0.008

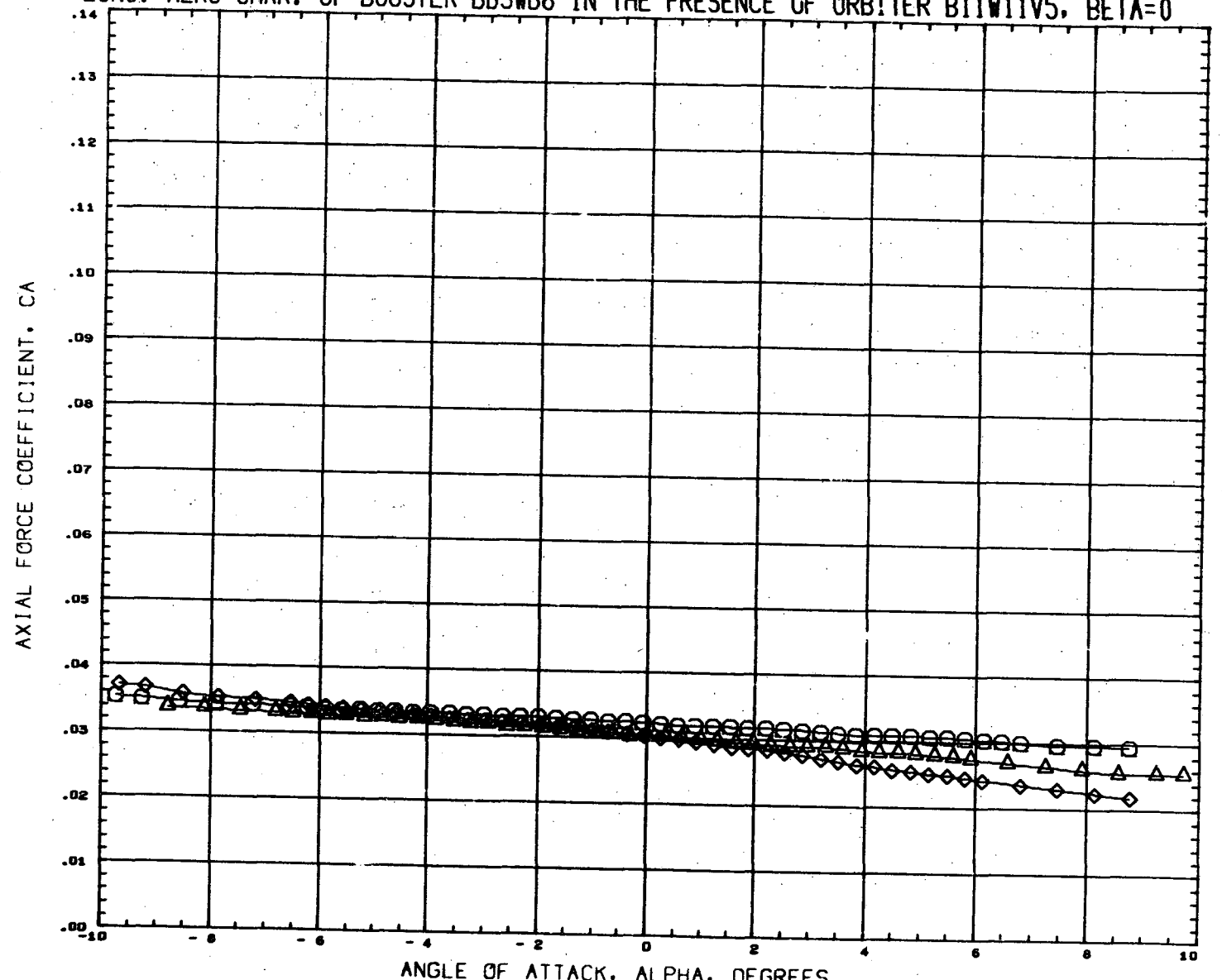
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU056) 21 JUN 71 PAGE 169

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

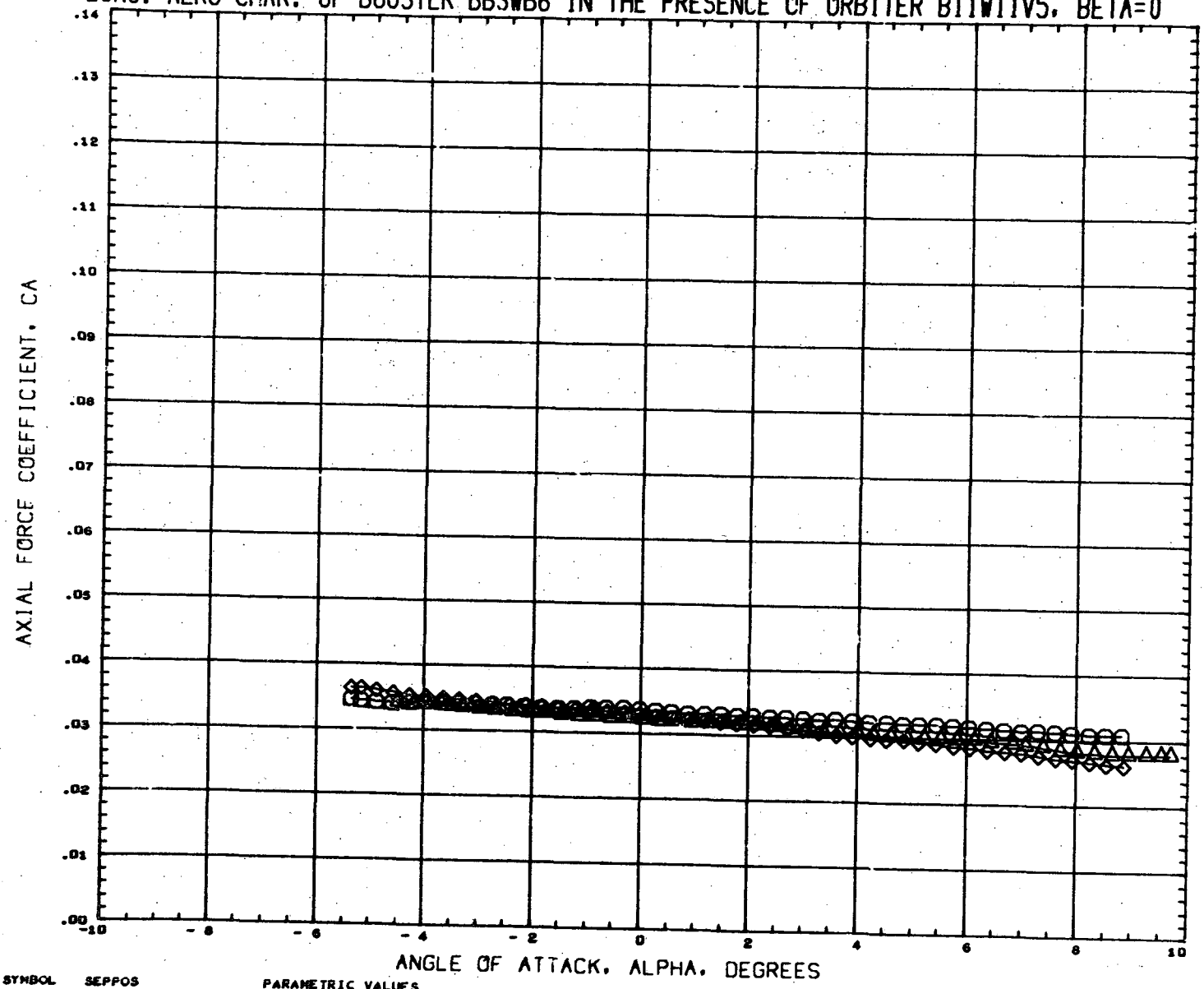
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

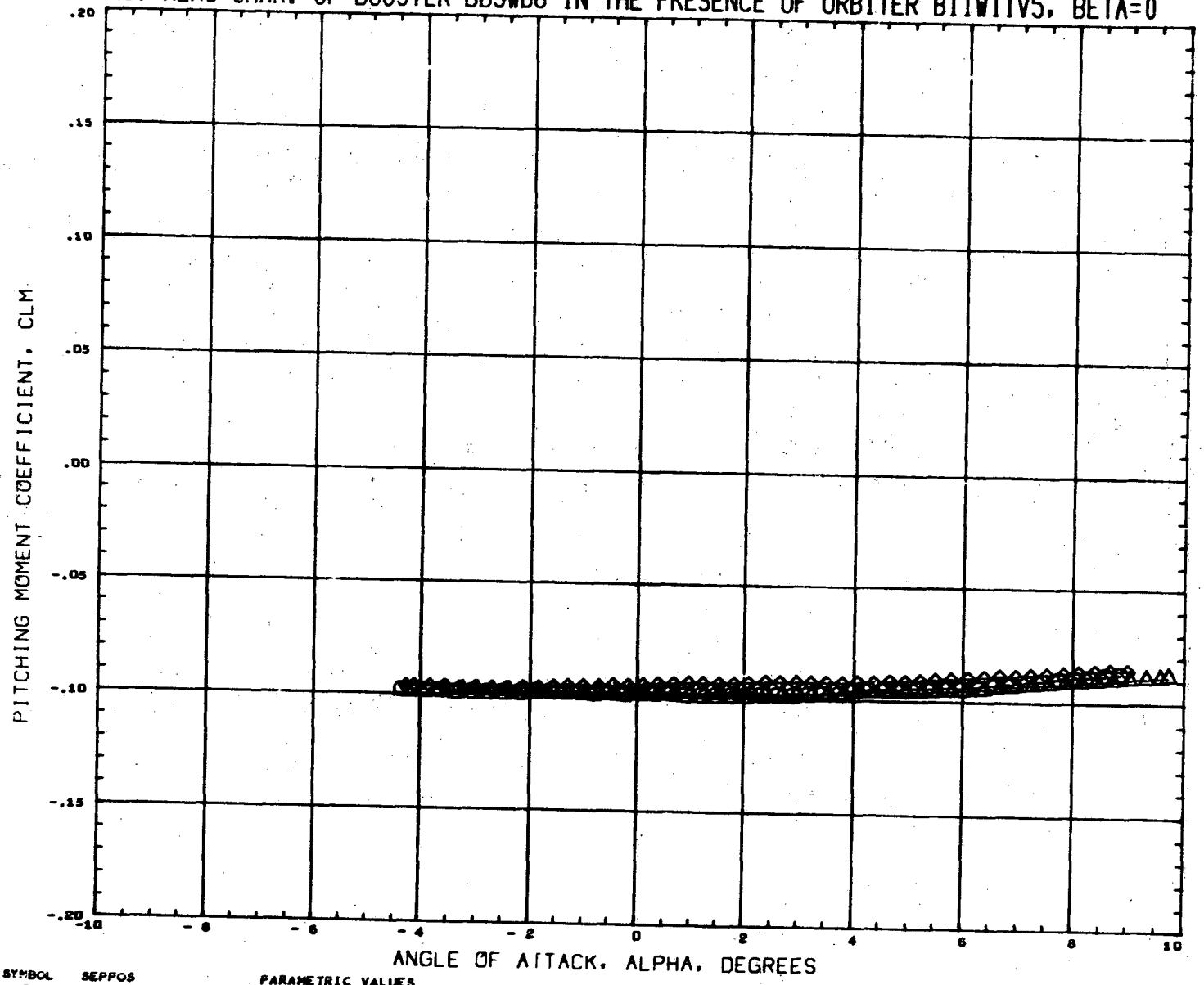
BETA	-	0.028	MACH		0.900
ALPB	-	5.224	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

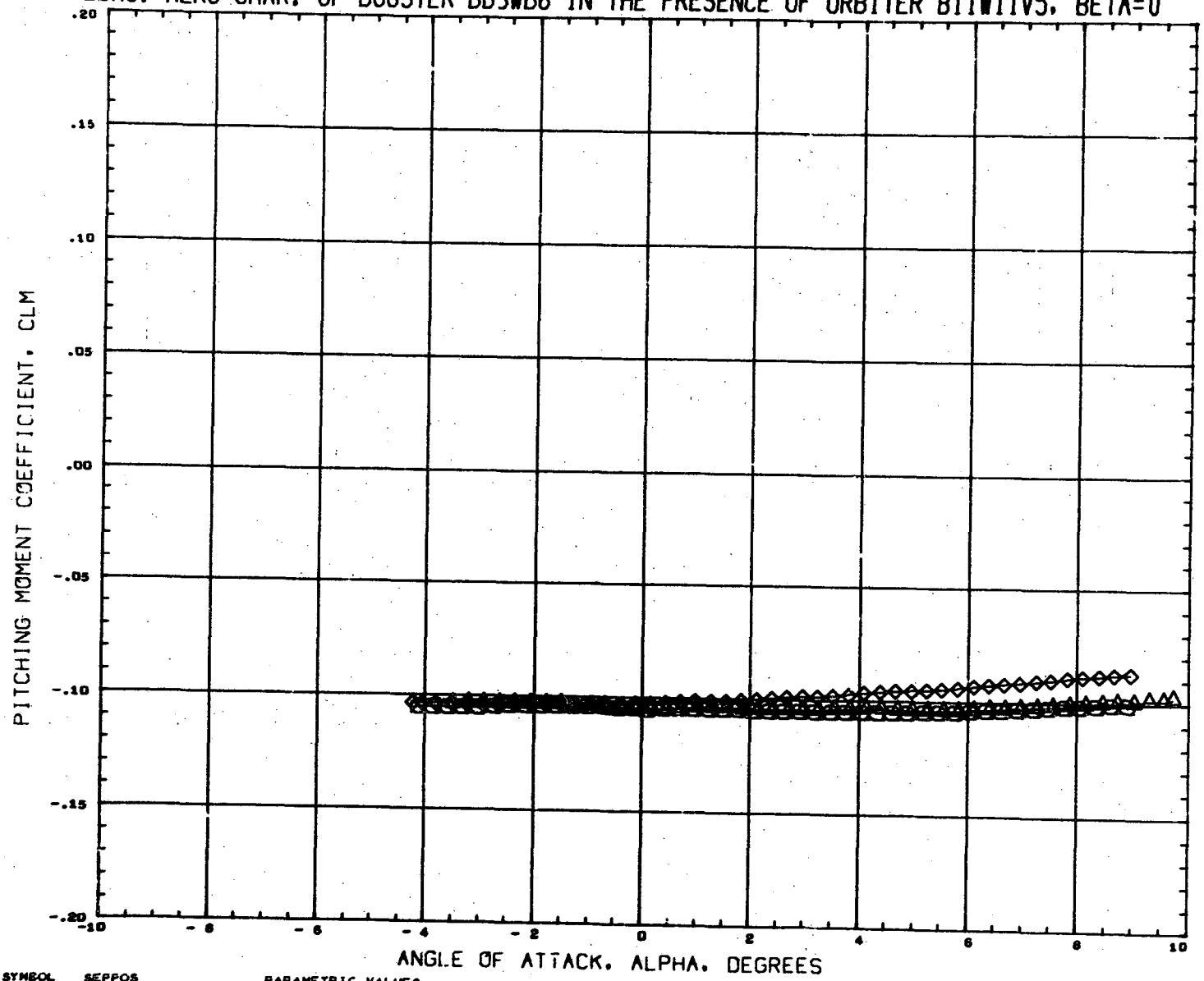
BETA	- 0.024	MACH	0.900
ALPB	3.908	BETB	- 0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

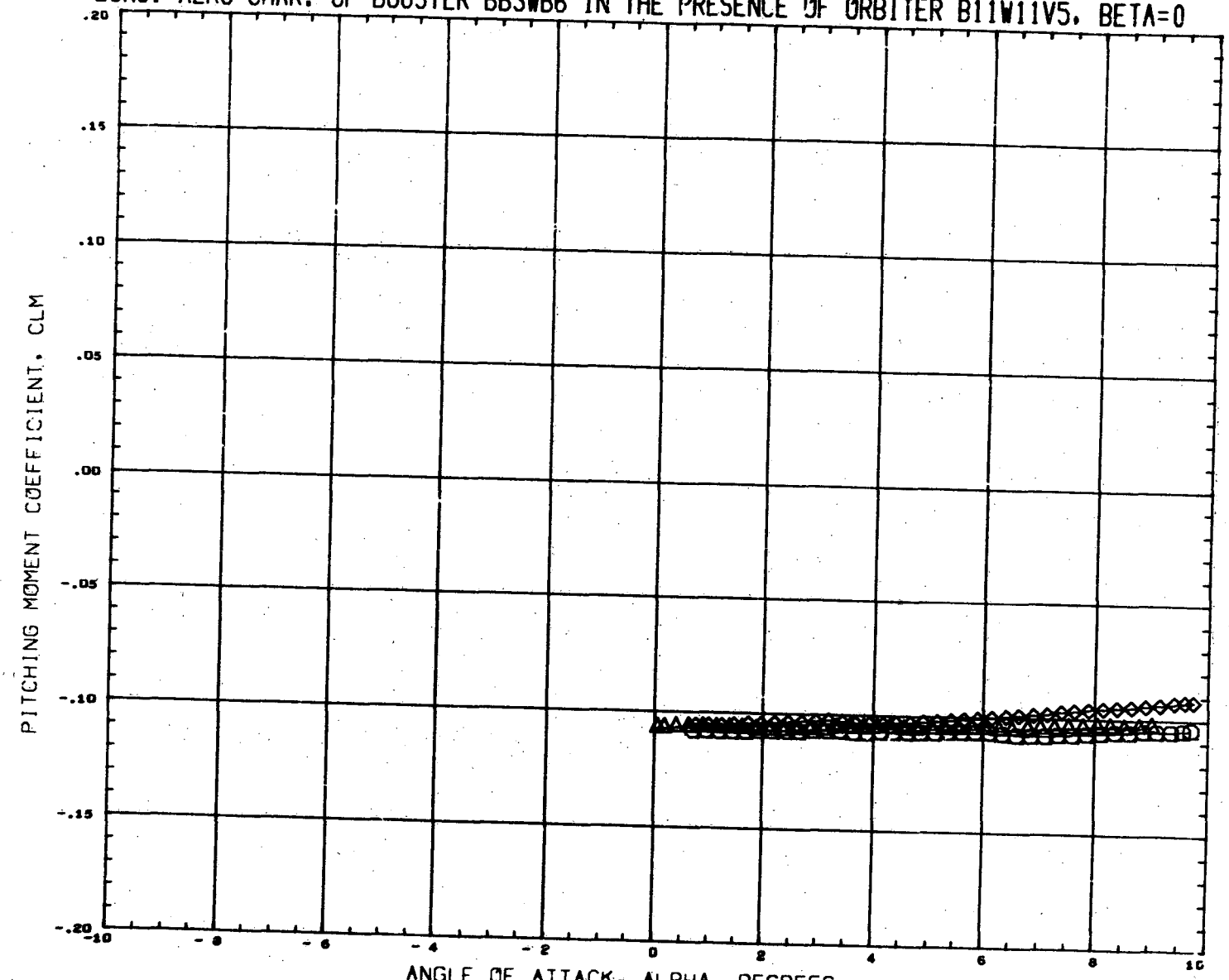
BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

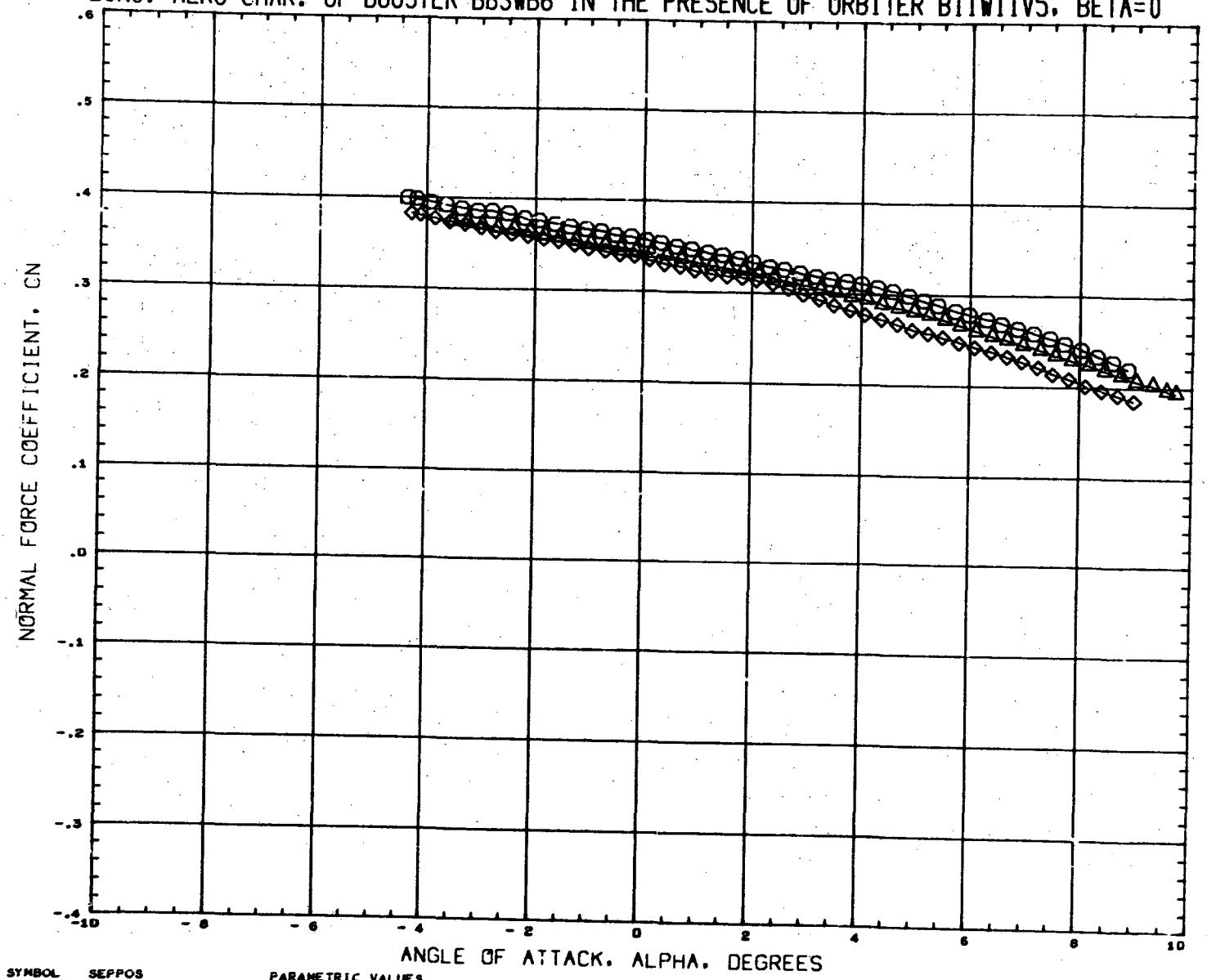
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8930	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU053) 21 JUN 71 PAGE 174

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0

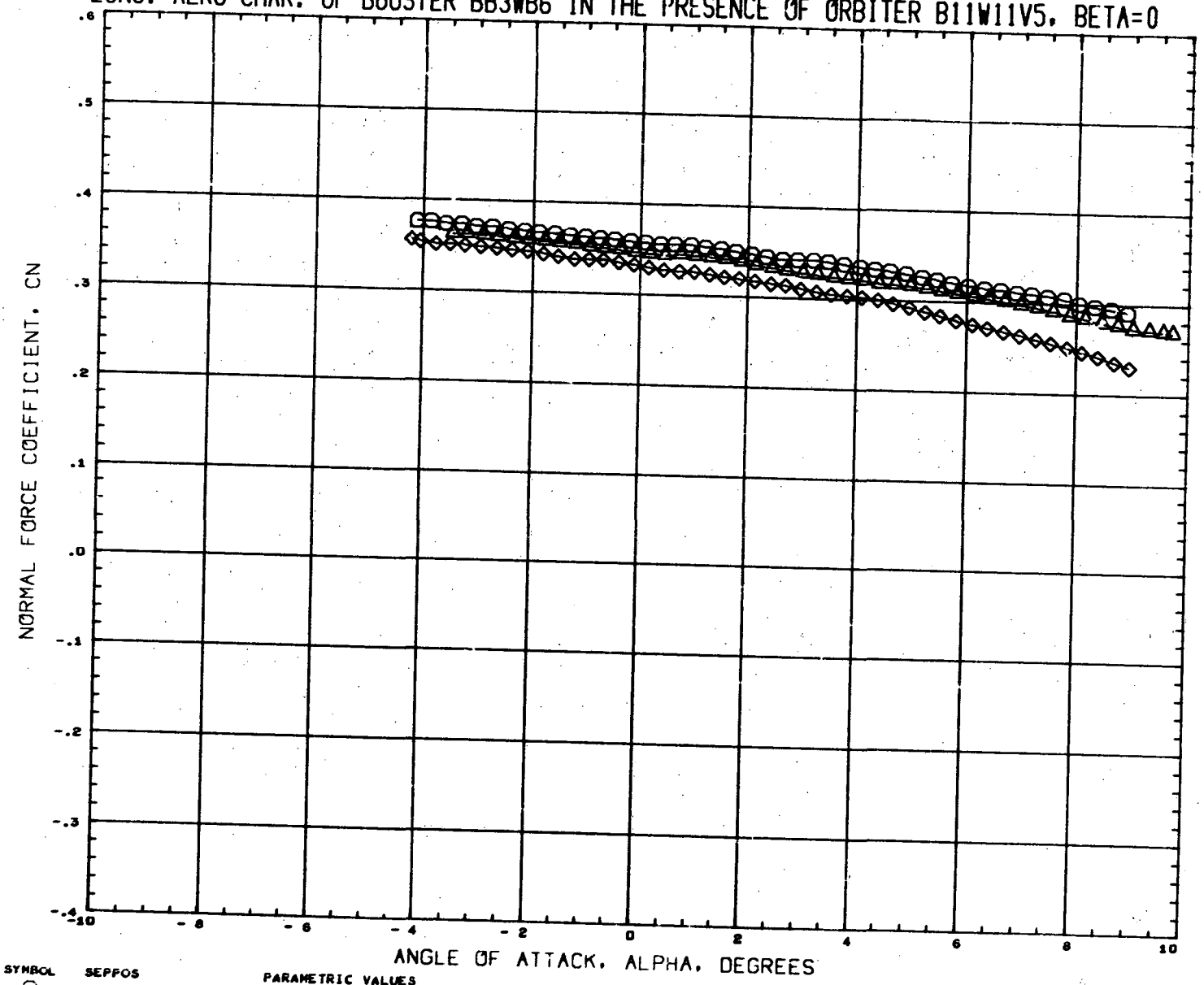


SYMBOL	SEPPOS	PARAMETRIC VALUES			
△	0.004	BETA	- 0.024	MACH	0.900
○	0.005	ALPB	3.908	BETB	- 0.007
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8390	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
◇	0.007
△	0.008
○	0.009

PARAMETRIC VALUES

BETA	- 0.024	MACH	0.900
ALPB	3.908	BETB	- 0.007

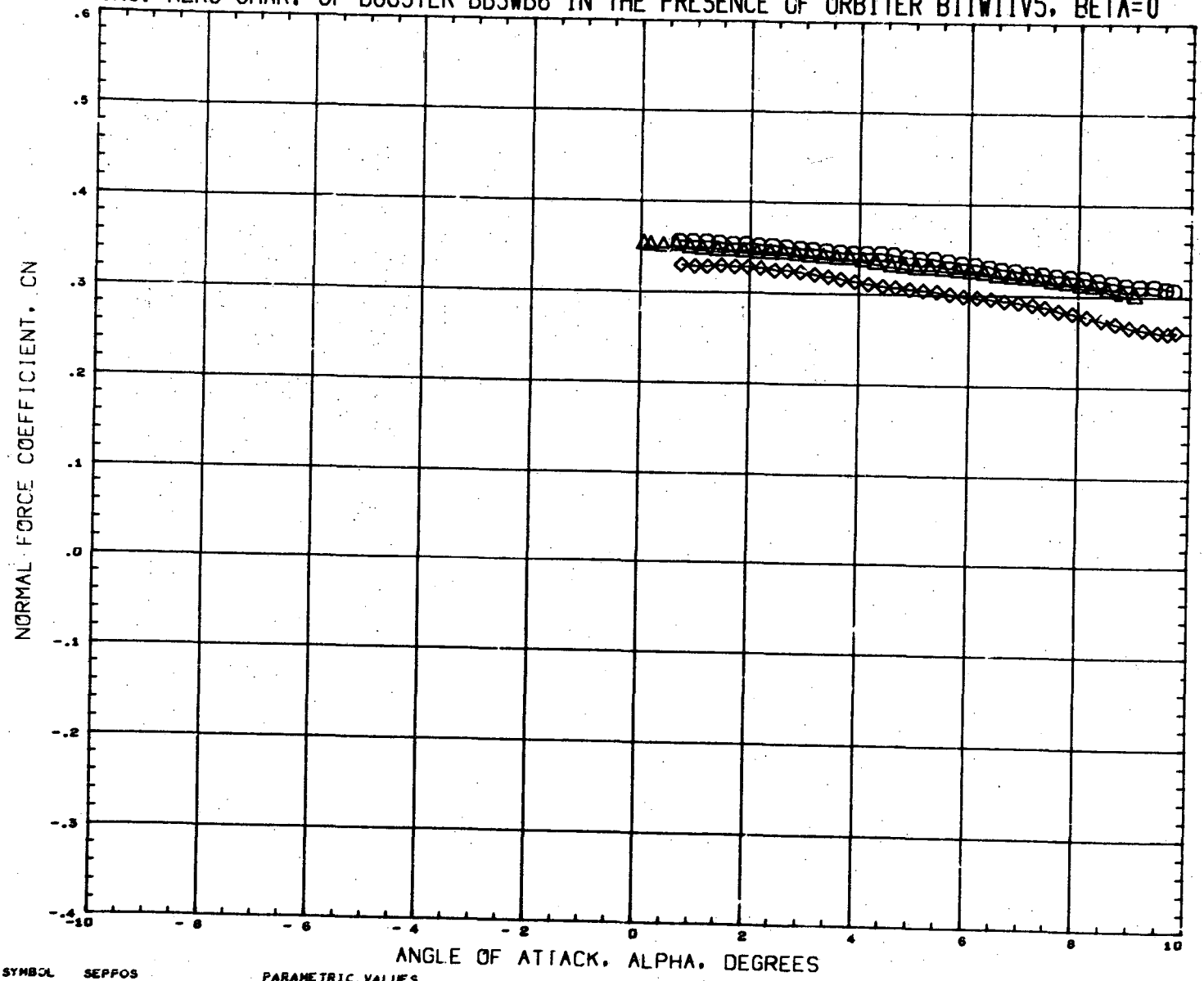
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU053) 21 JUN 71

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

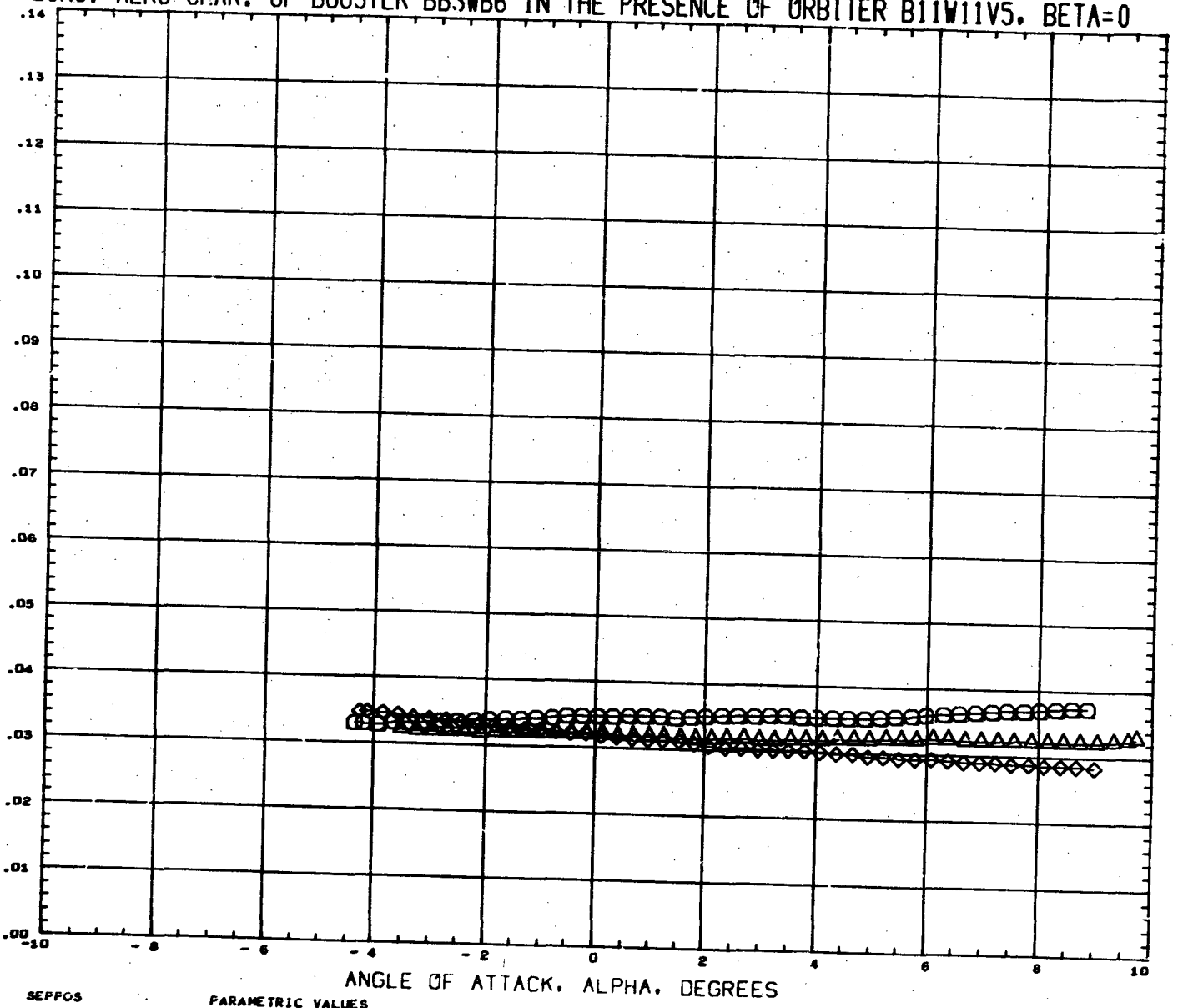
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU053) 21 JUN 71

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

BETA	-	0.024	MACH		0.900
ALPB		3.908	BETB	-	0.007

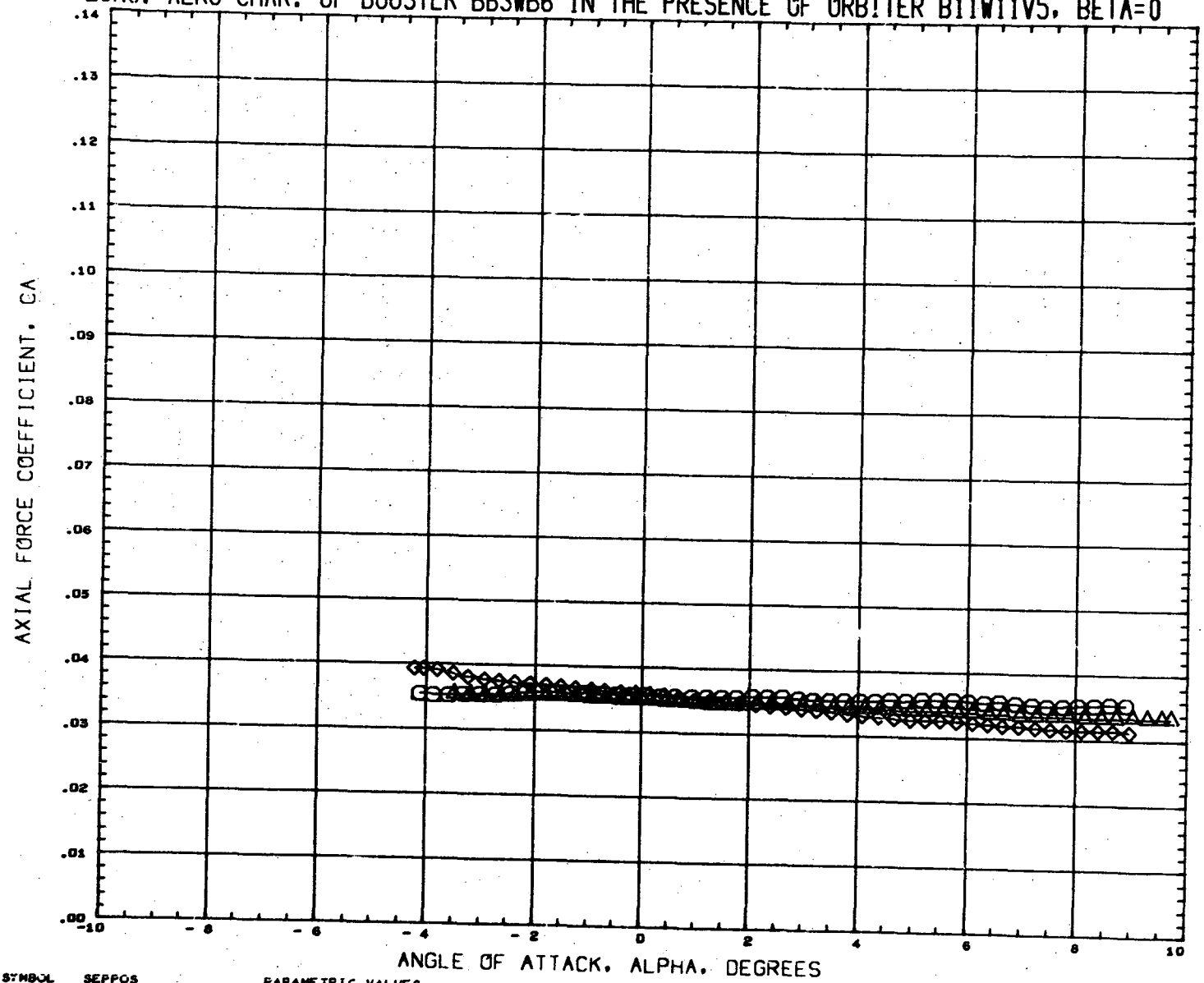
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU053) 21 JUN 71 PAGE 178

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

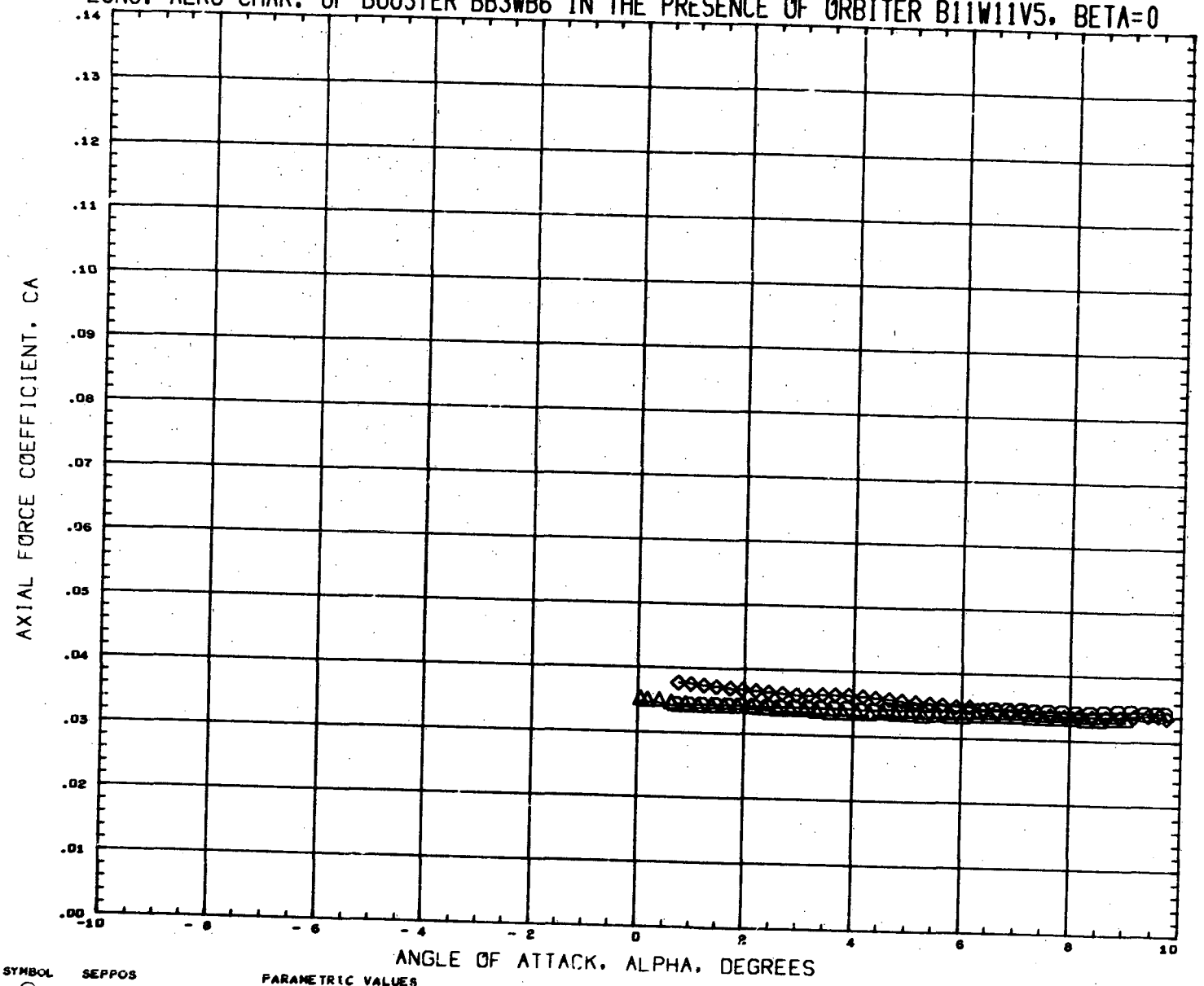
BETA	- 0.024	MACH	0.900
ALPB	3.908	BETB	- 0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3730	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

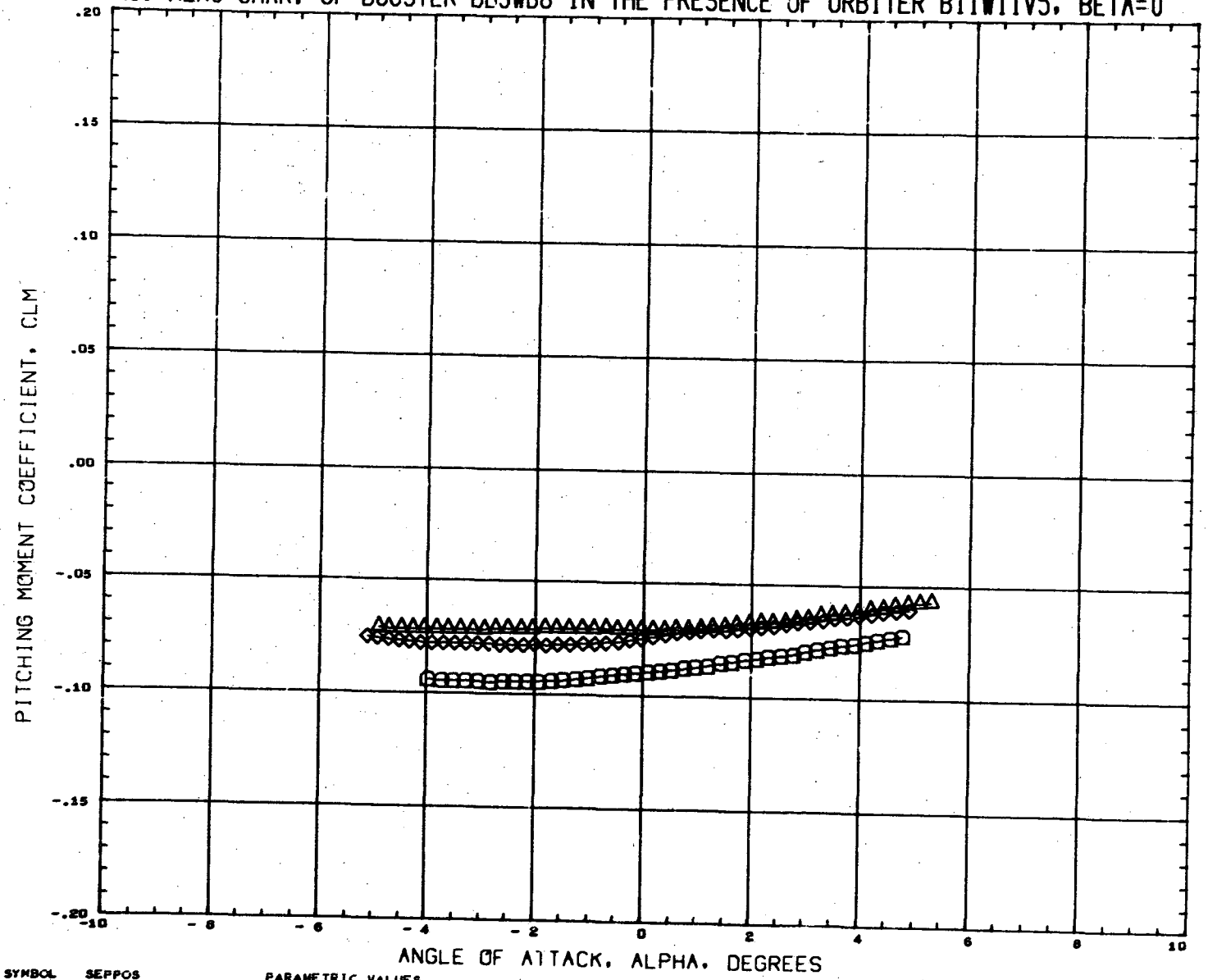
BETA	-	0.024	MACH		0.900
ALPB		3.908	SETB	-	0.007

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

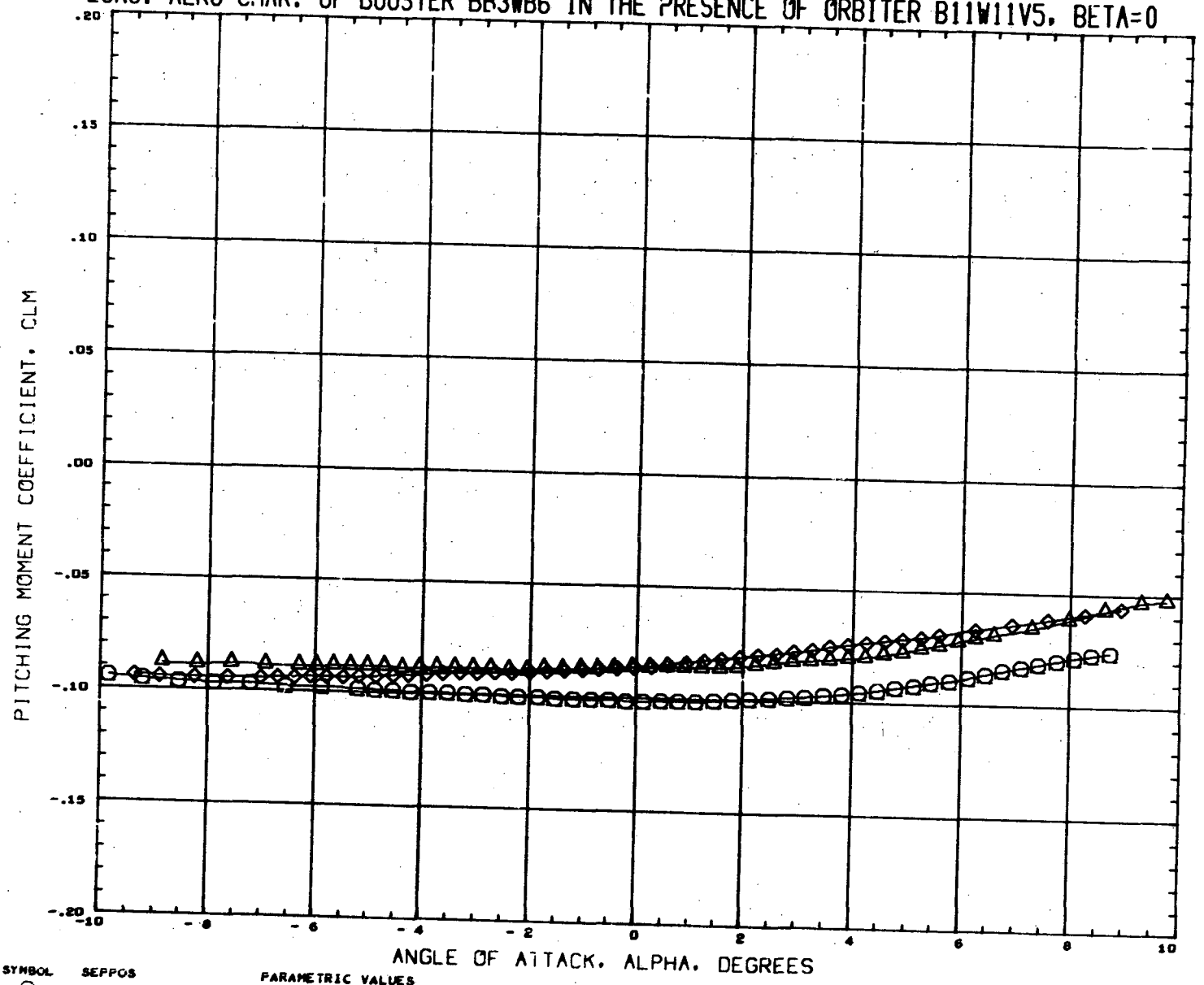
BETA	-	0.033	MACH		1.090
ALFB		0.195	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

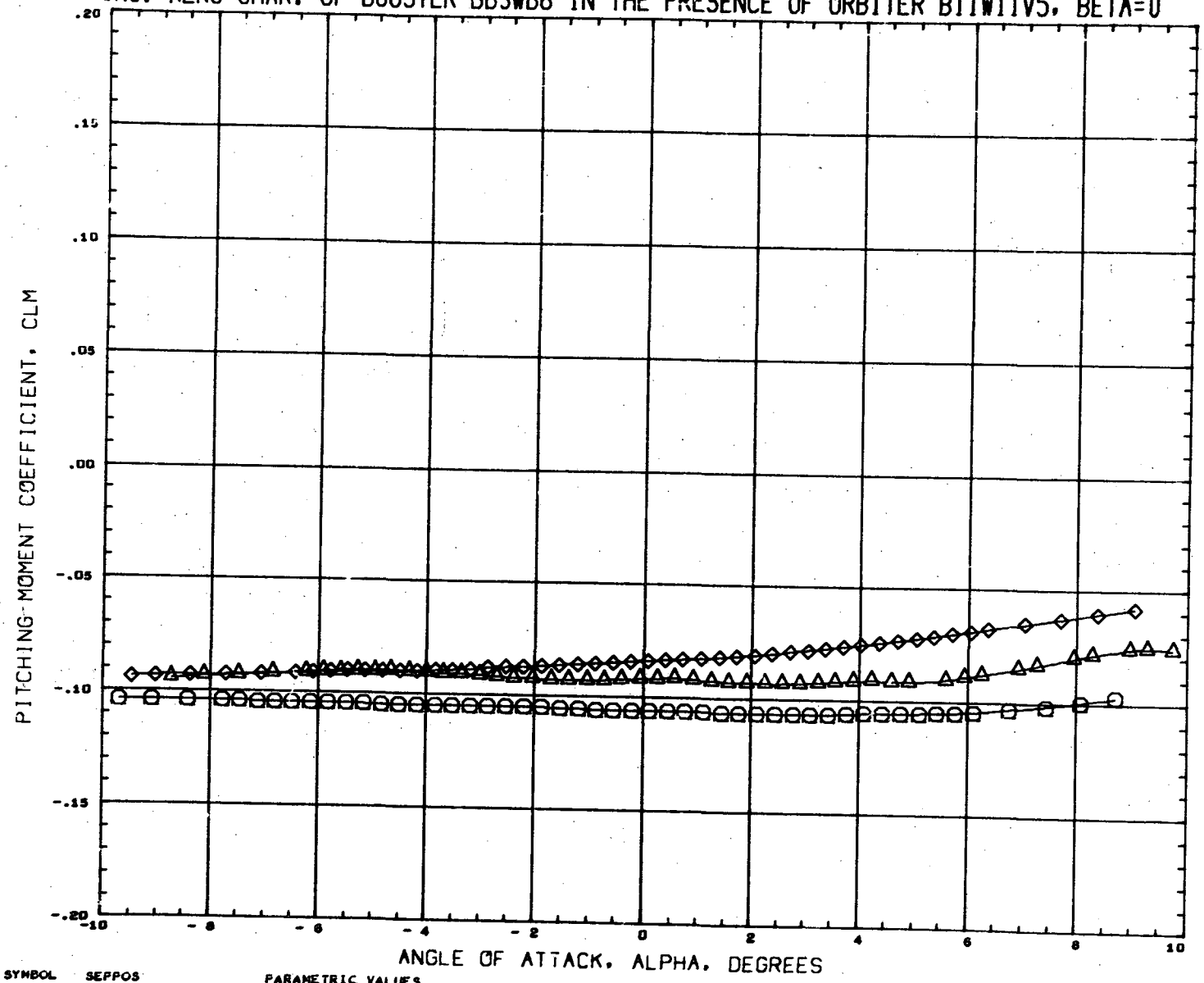
BETA	- 0.033	MACH	1.090
ALPB	0.195	BETB	- 0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

CREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0000	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

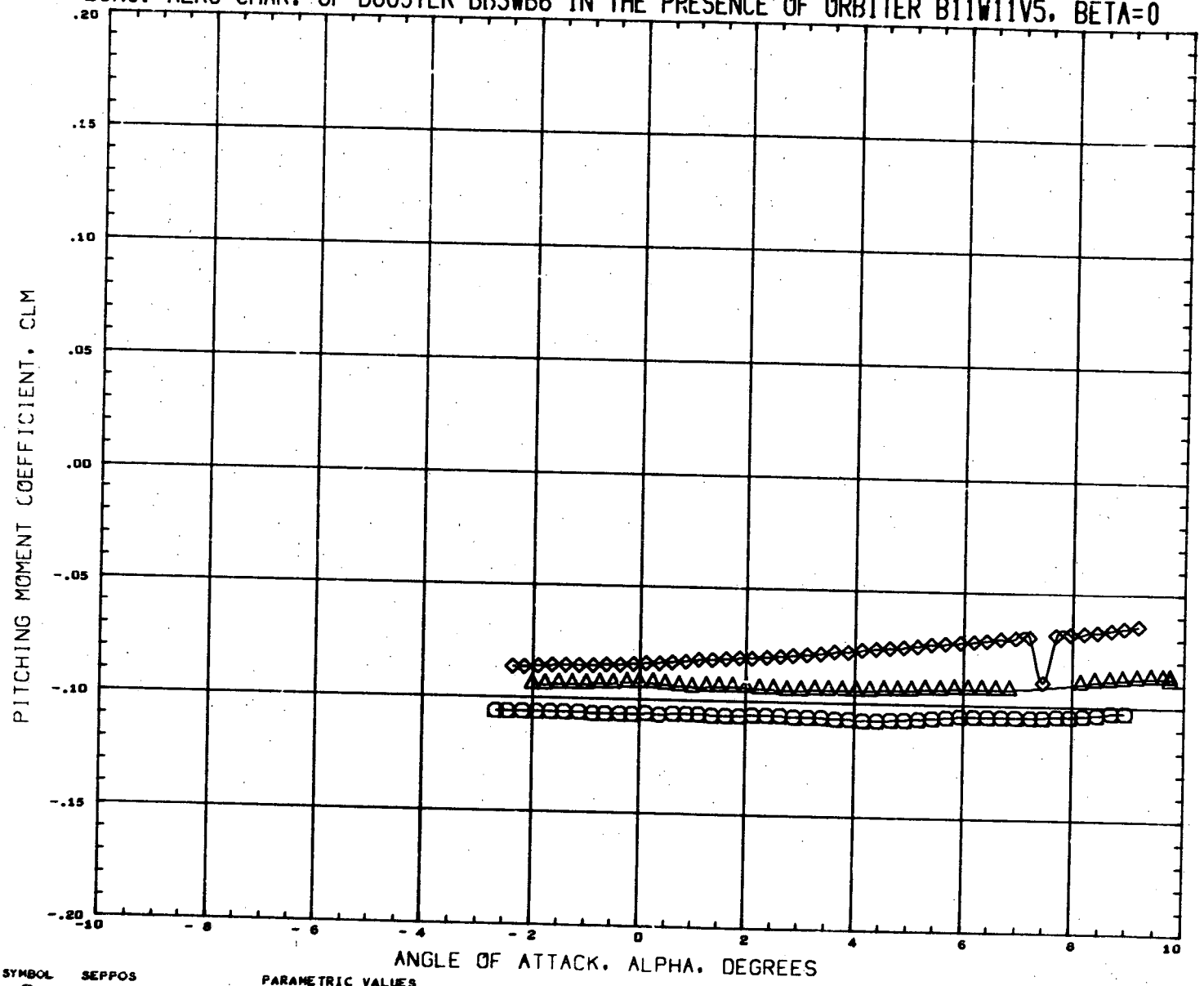
BETA	- 0.033	MACH	1.090
ALPB	0.195	BETB	- 0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

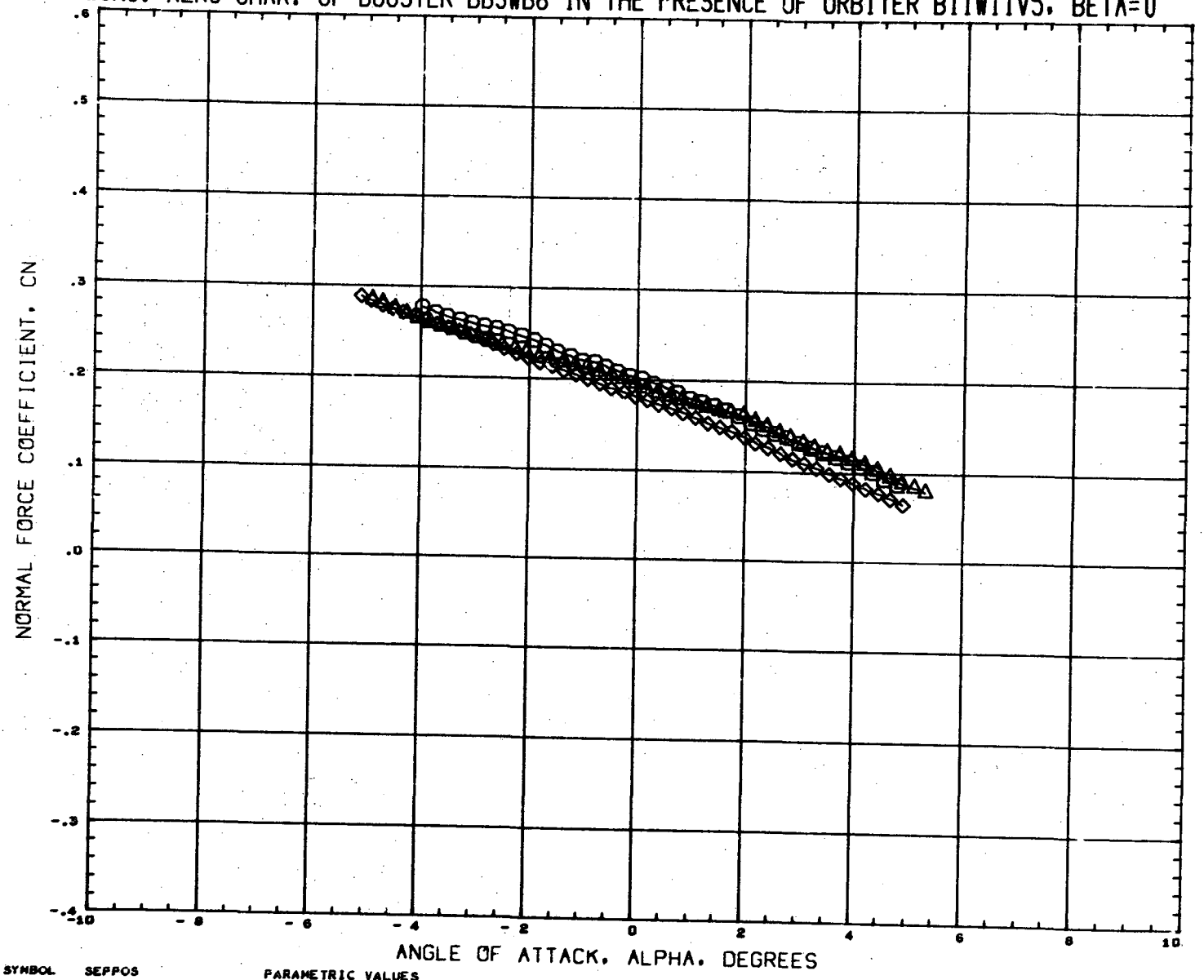
BETA	-	0.033	MACH		1.090
ALPB		0.195	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.001	BETA	- 0.033	MACH	1.090	
△	0.002	ALPB	0.195	BETB	- 0.016	
◇	0.003					

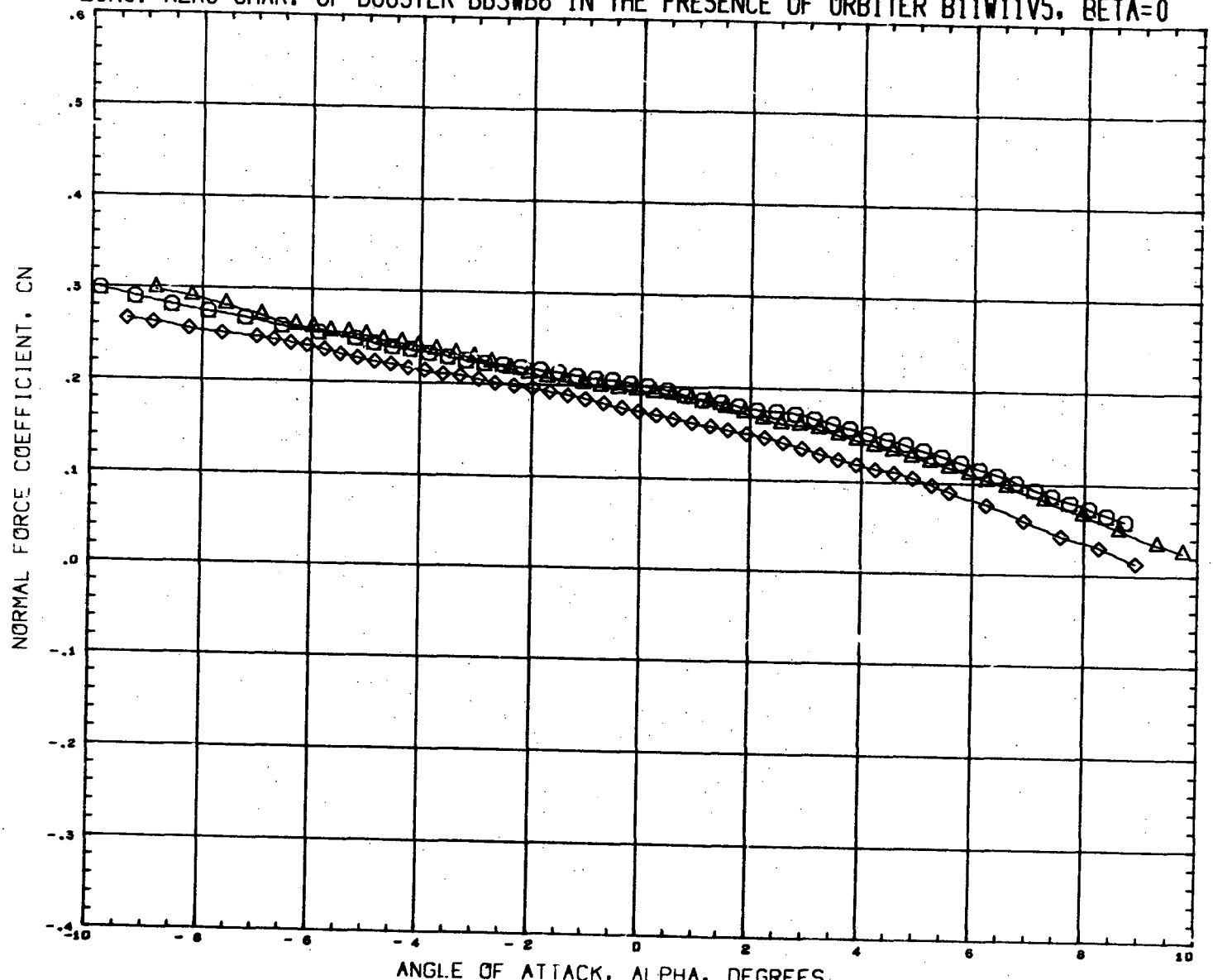
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8930	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU047) 21 JUN 71 PAGE 185

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.033	MACH	1.090
△	0.005	ALPB	0.195	BETB	- 0.016
◇	0.006				

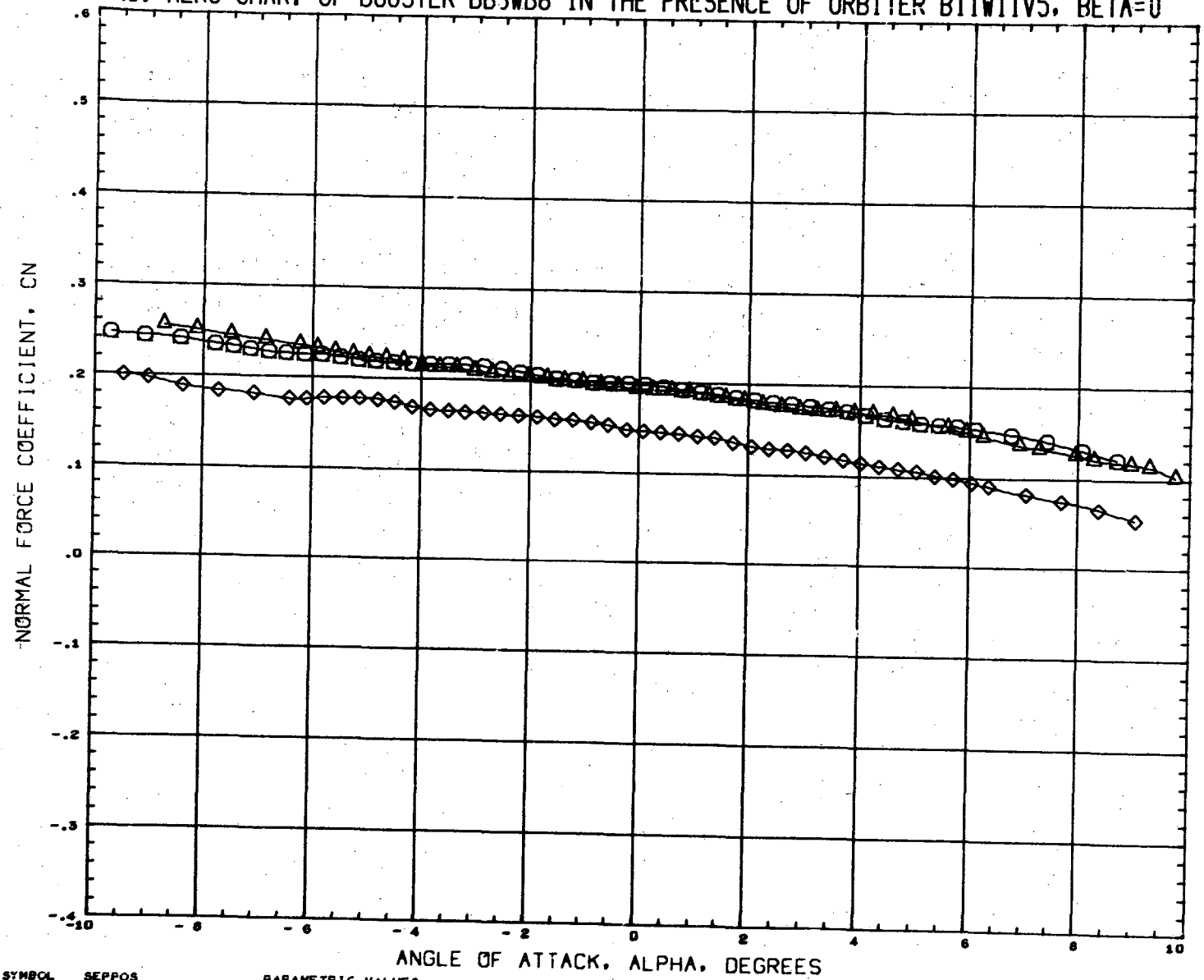
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU047) 21 JUN 71 PAGE 186

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

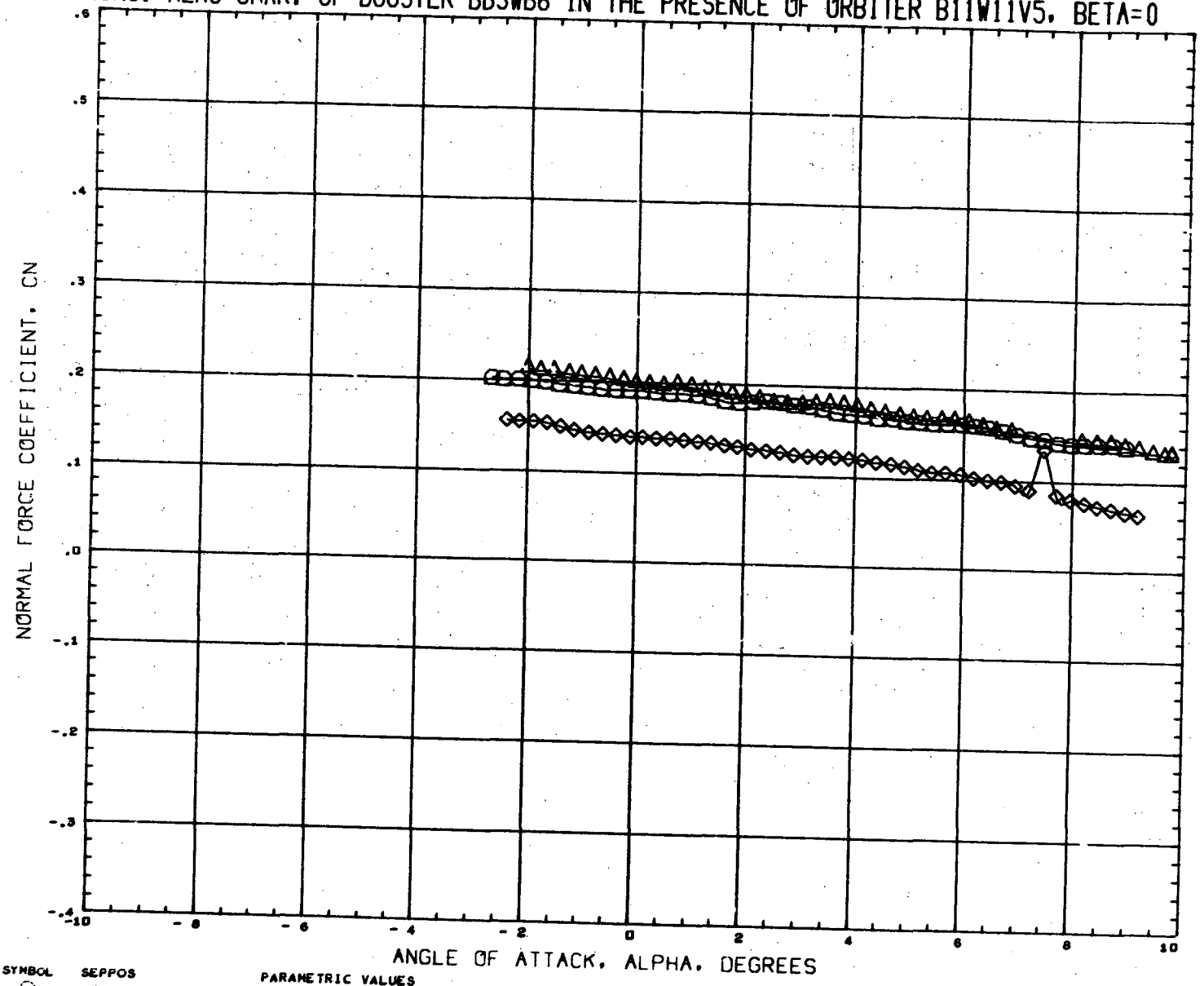
BETA	-	0.033	MACH		1.090
ALFB		0.195	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



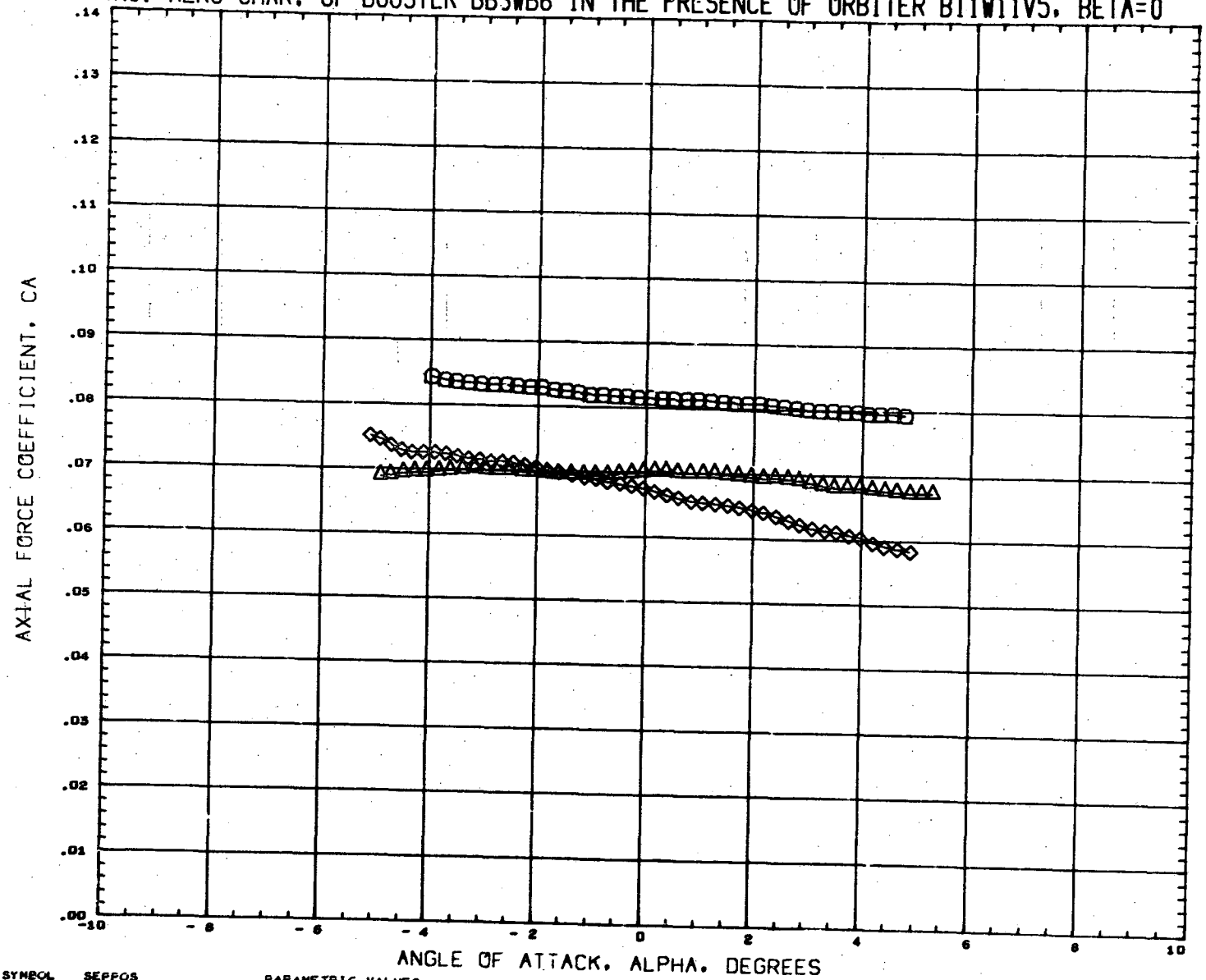
SYMBOL	SEPPOS	PARAMETRIC VALUES				
△○	0.010	BETA	- 0.033	MACH	1.090	
◇	0.011	ALPB	0.195	BETB	- 0.016	
	0.012					

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8900	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.033	MACH	1.090	
△	0.002	ALFB	0.195	BETB	- 0.016	
◇	0.003					

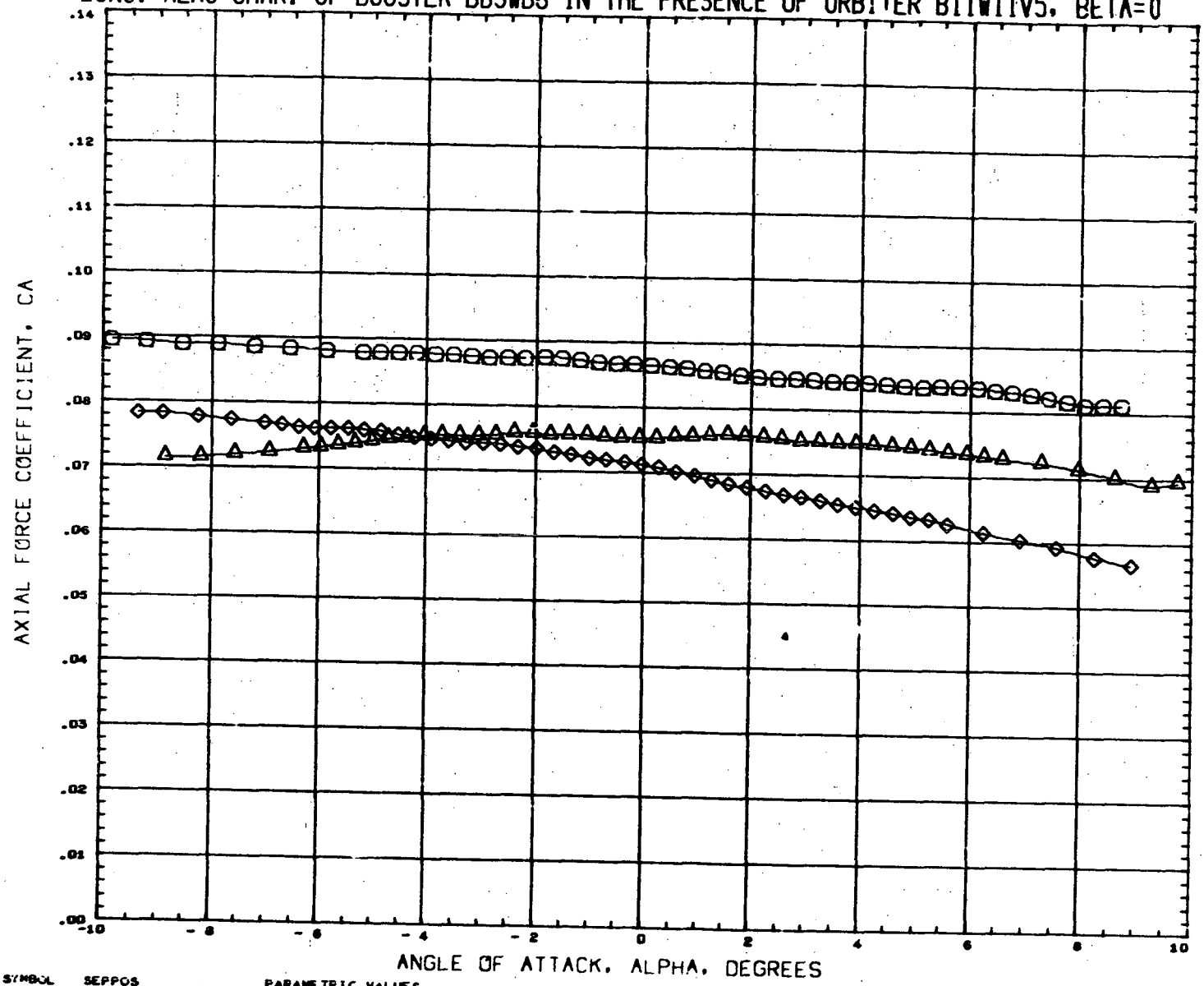
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU047) 21 JUN 71 PAGE 189

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

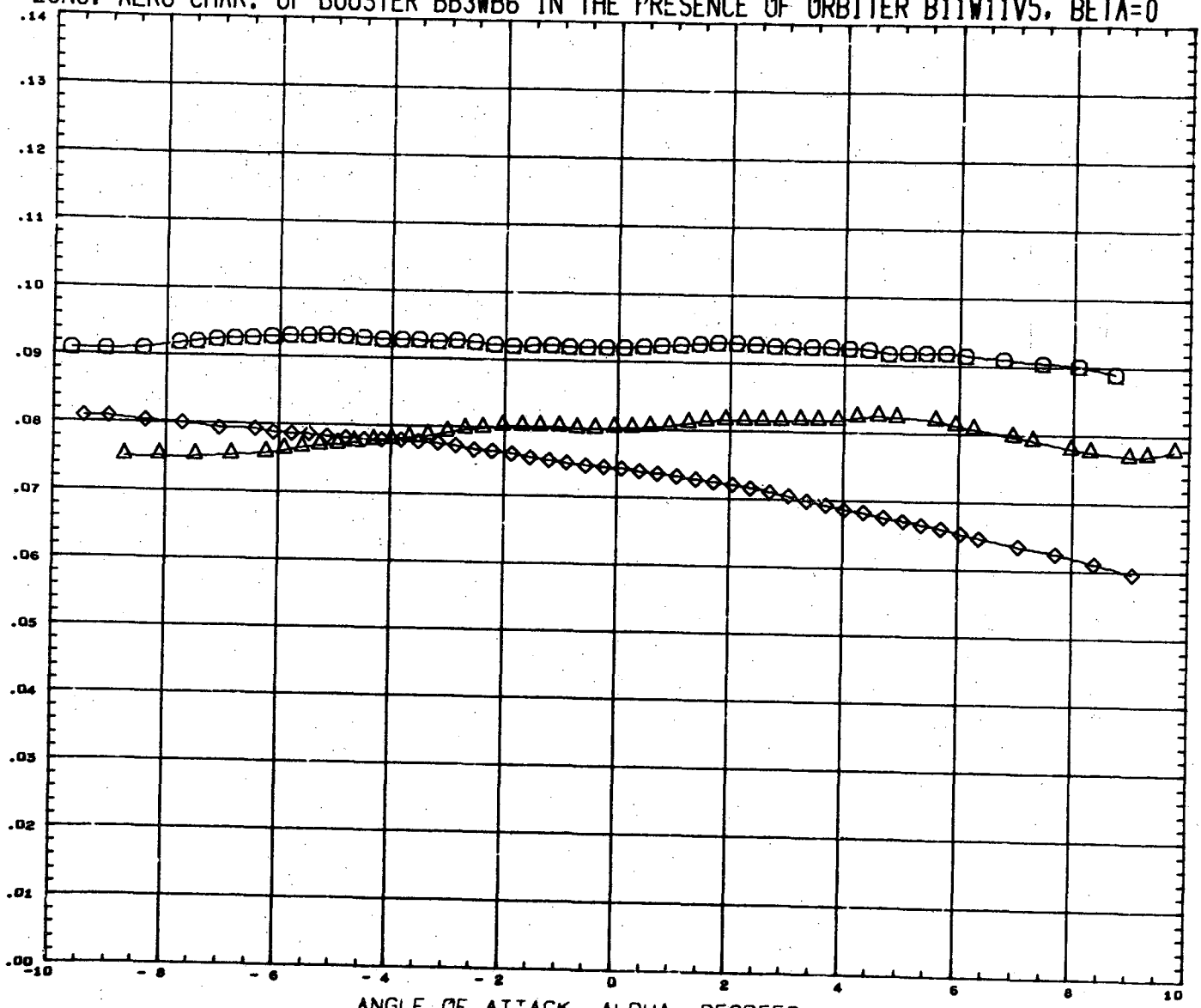
BETA	-	0.033	MACH		1.090
ALFB		0.195	BETB	-	0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



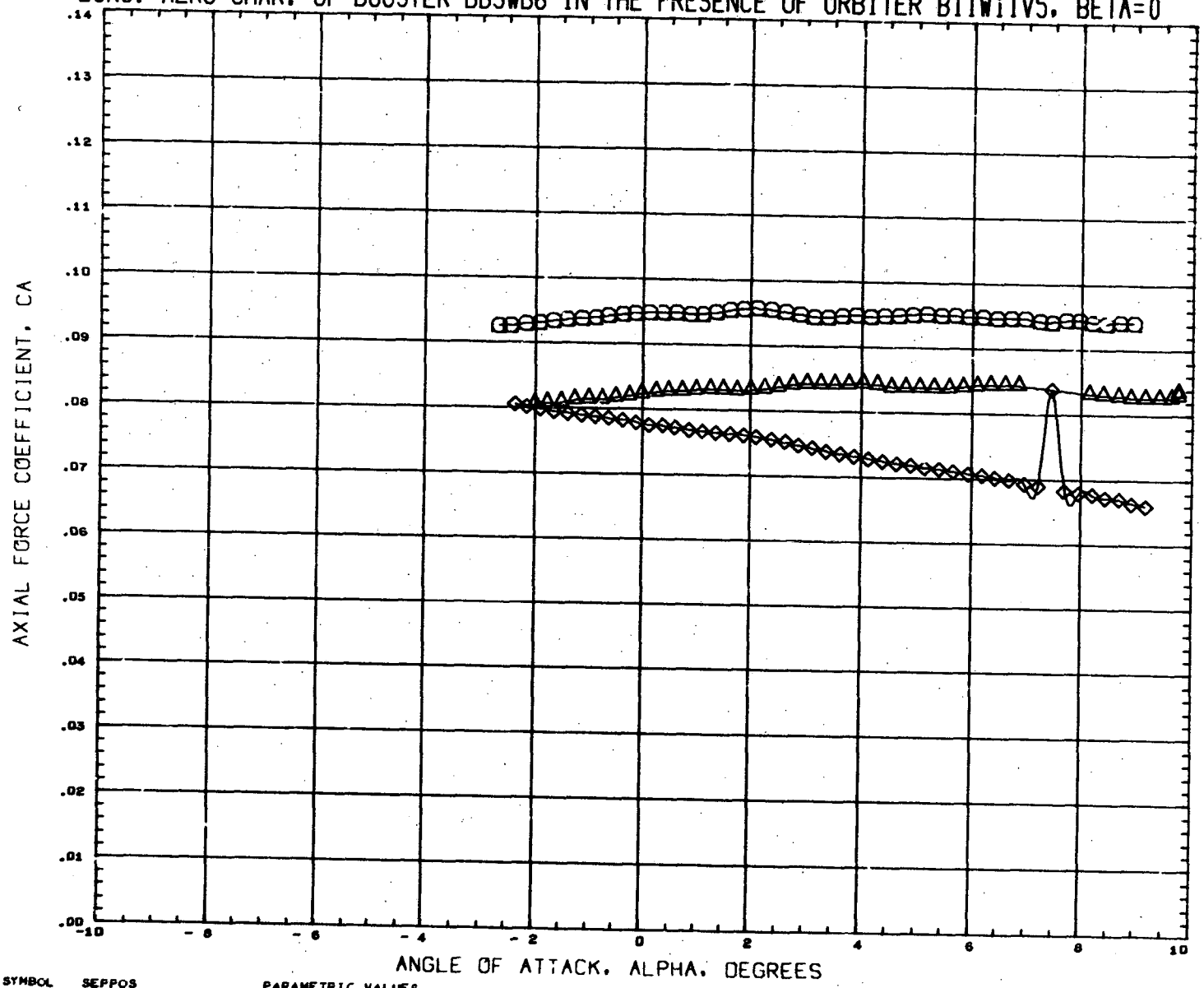
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.007	BETA	- 0.033	MACH	1.090
△	0.008	ALFB	0.195	BETB	- 0.016
◇	0.009				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

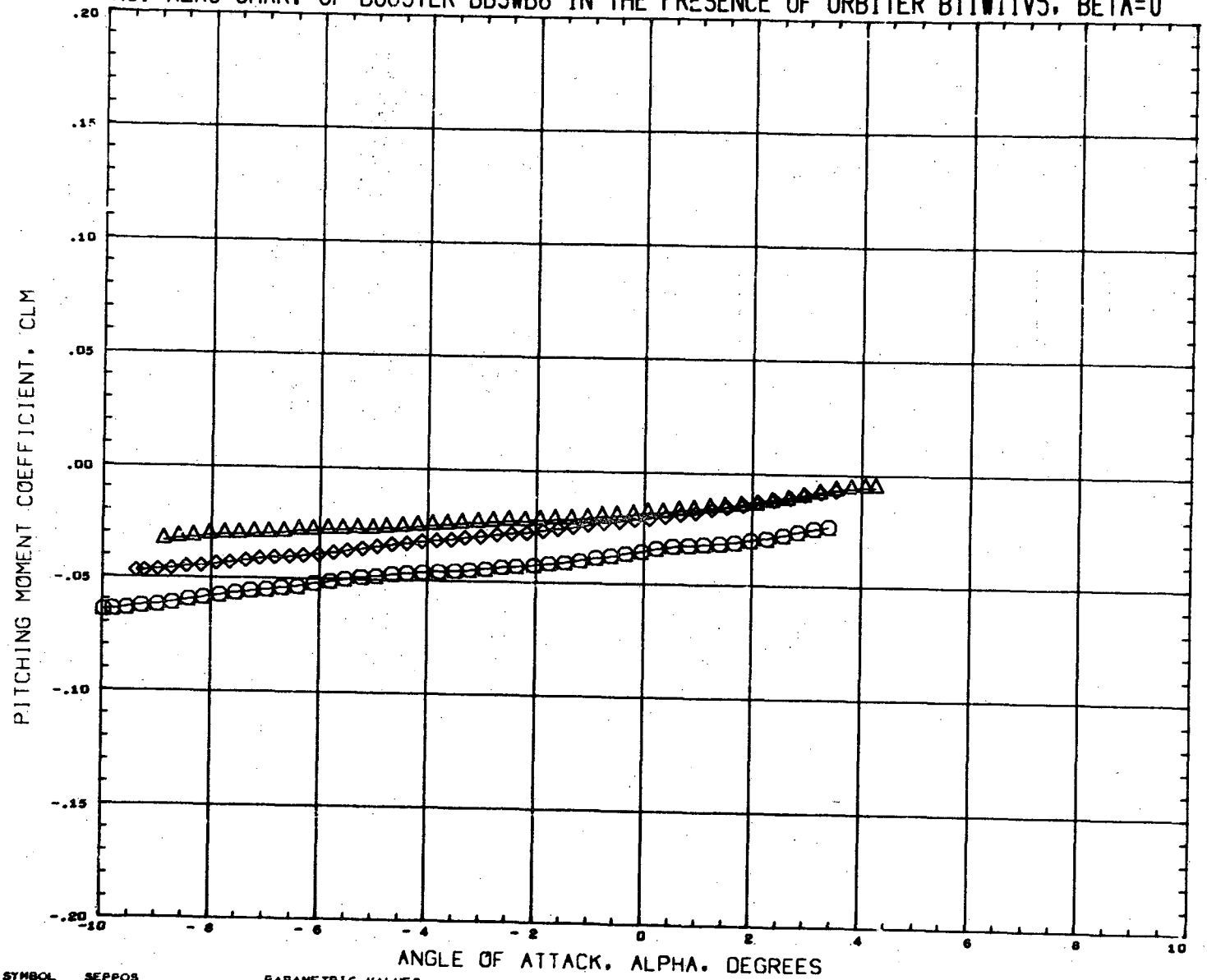
BETA	-	0.033	MACH		1.090
ALPB		0.195	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

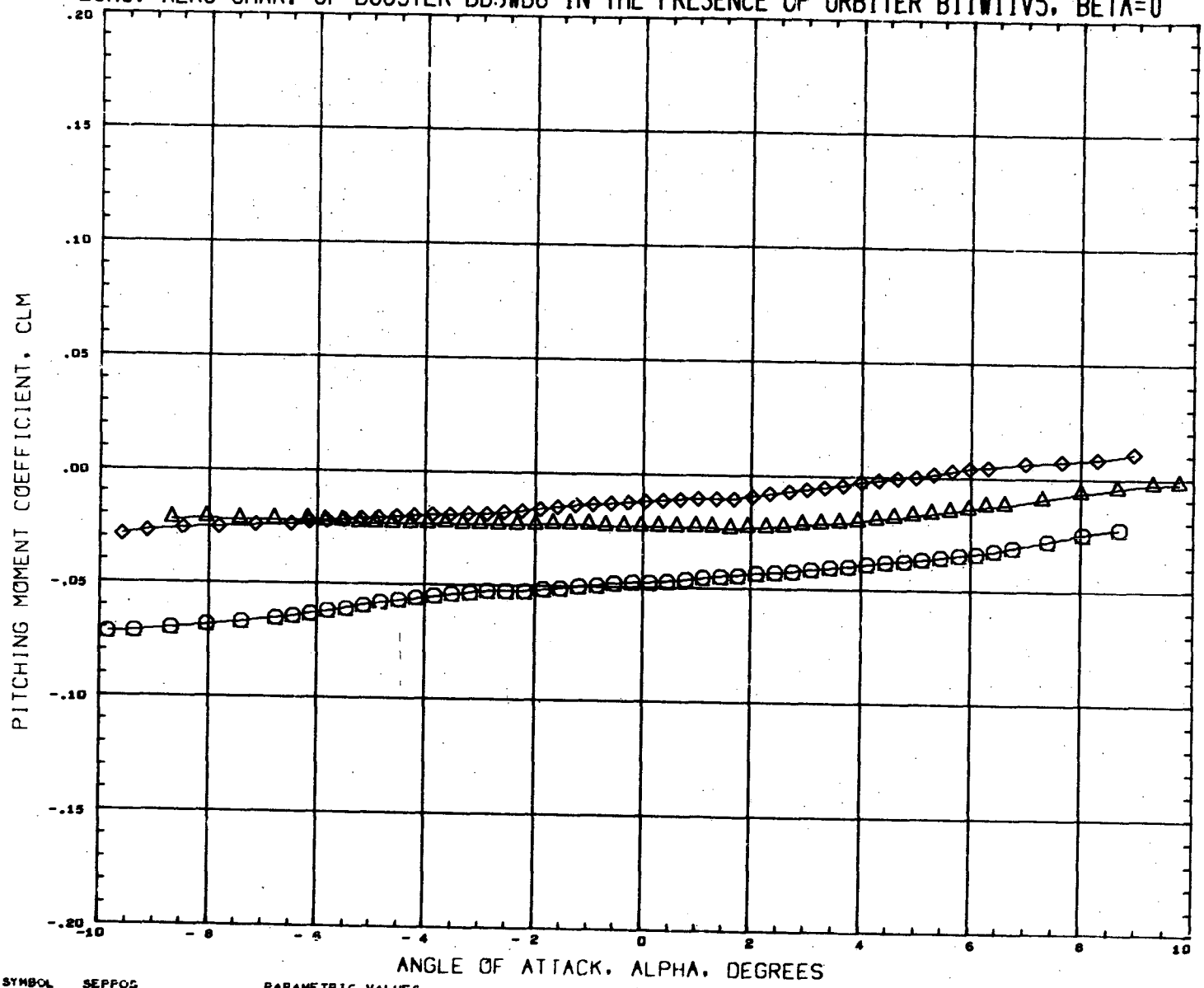
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8930	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU055) 21 JUN 71 PAGE 193

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

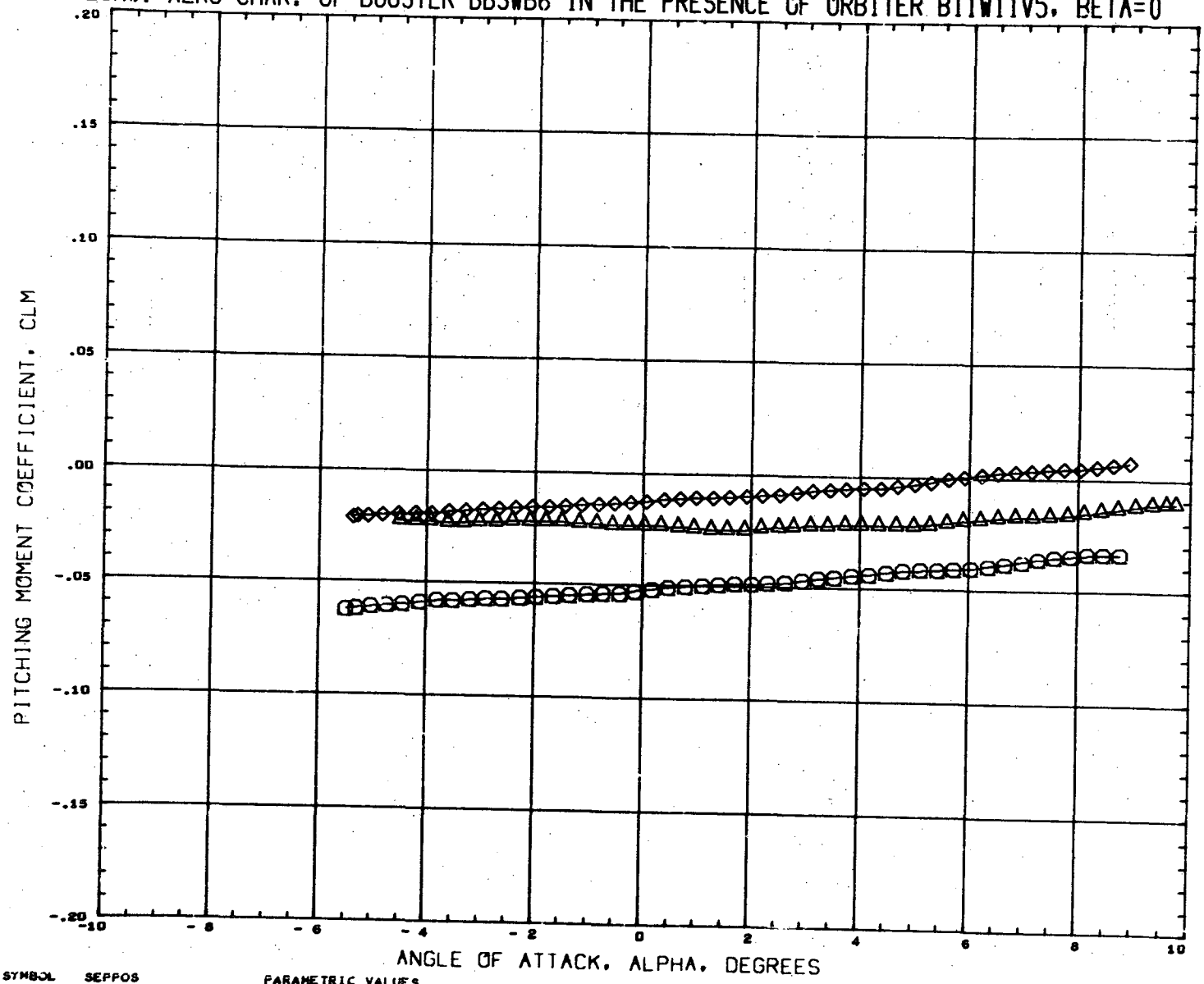
BETA	- 0.026	MACH	1.100
ALPB	- 5.257	BETB	- 0.016

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

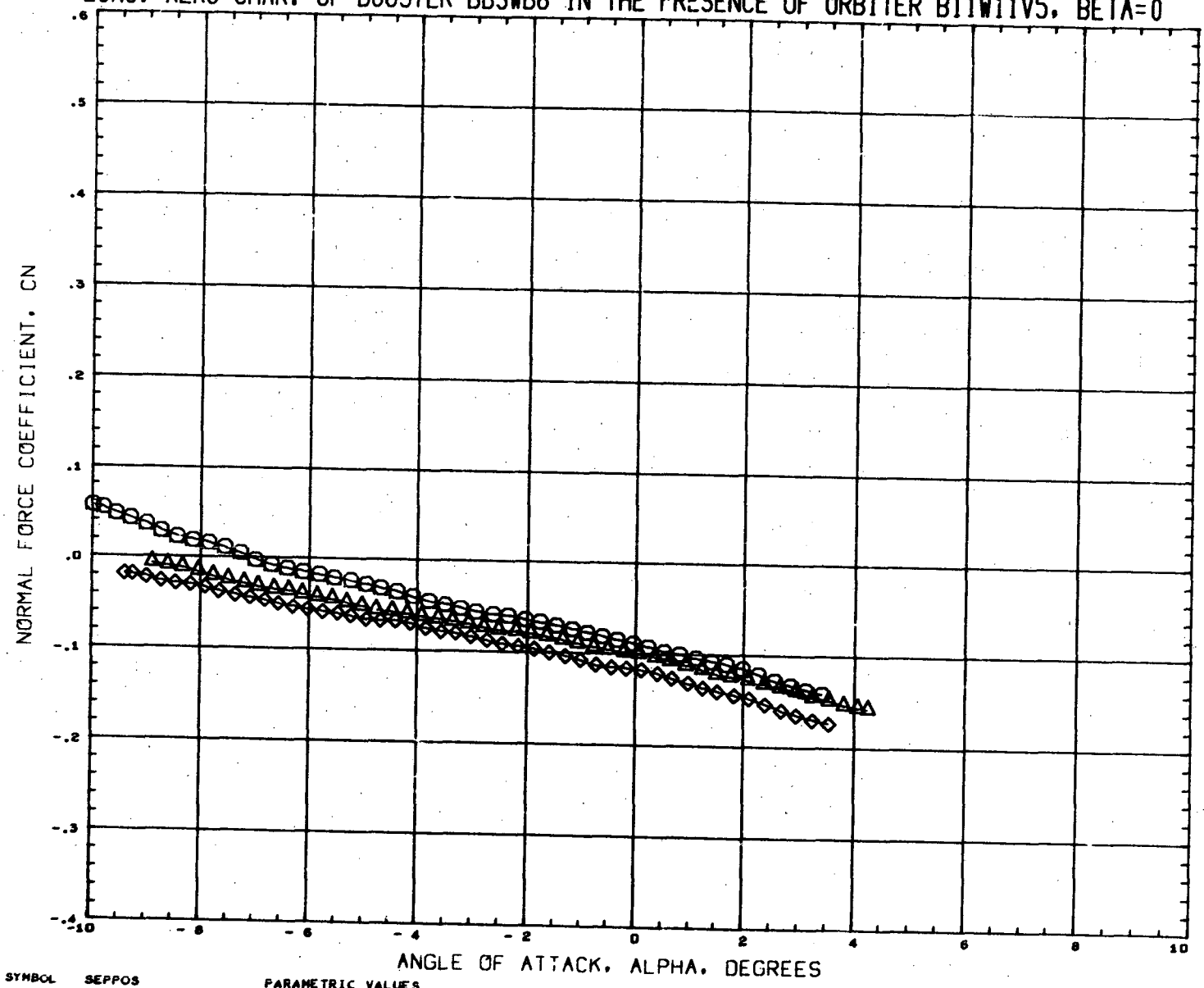
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

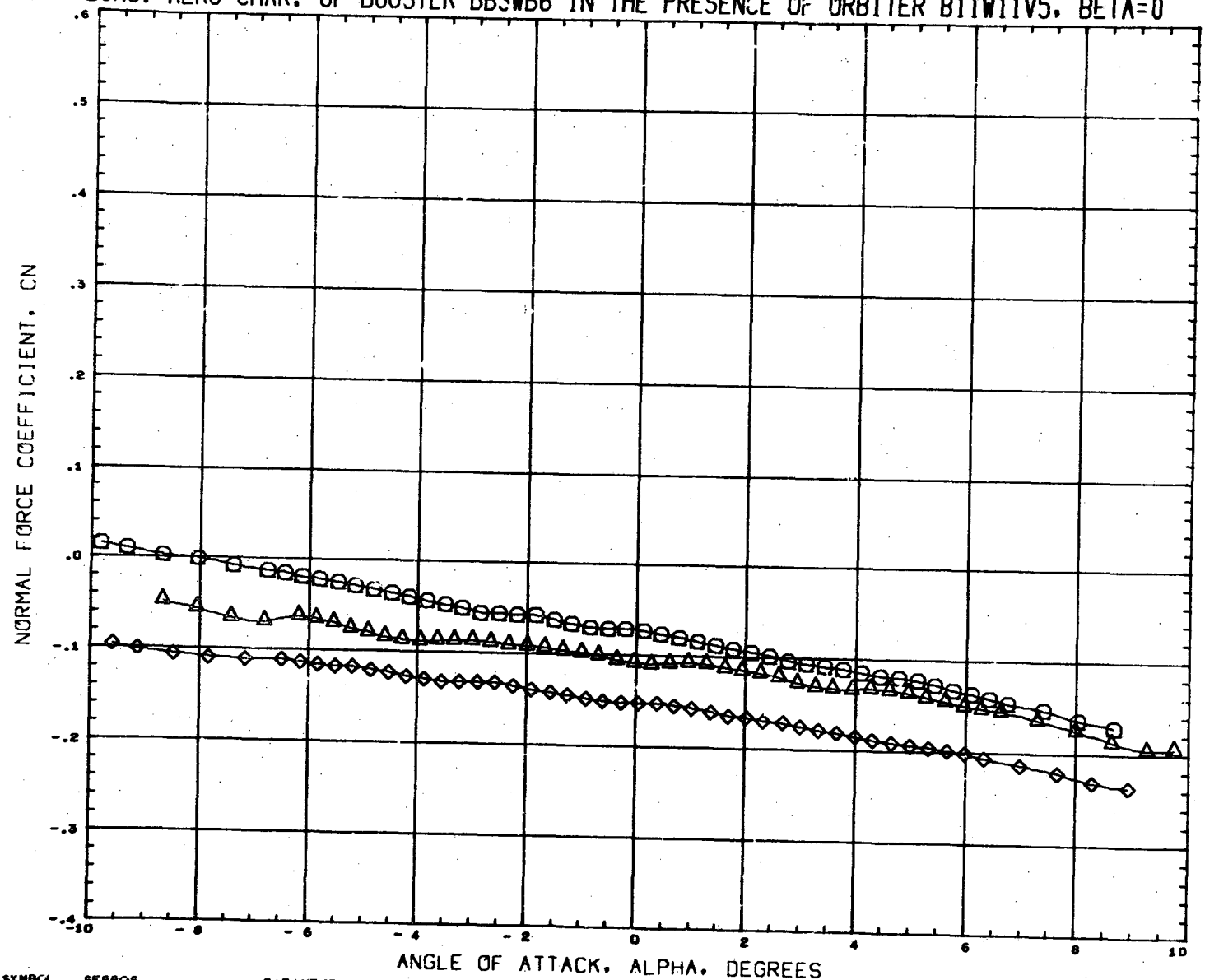
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

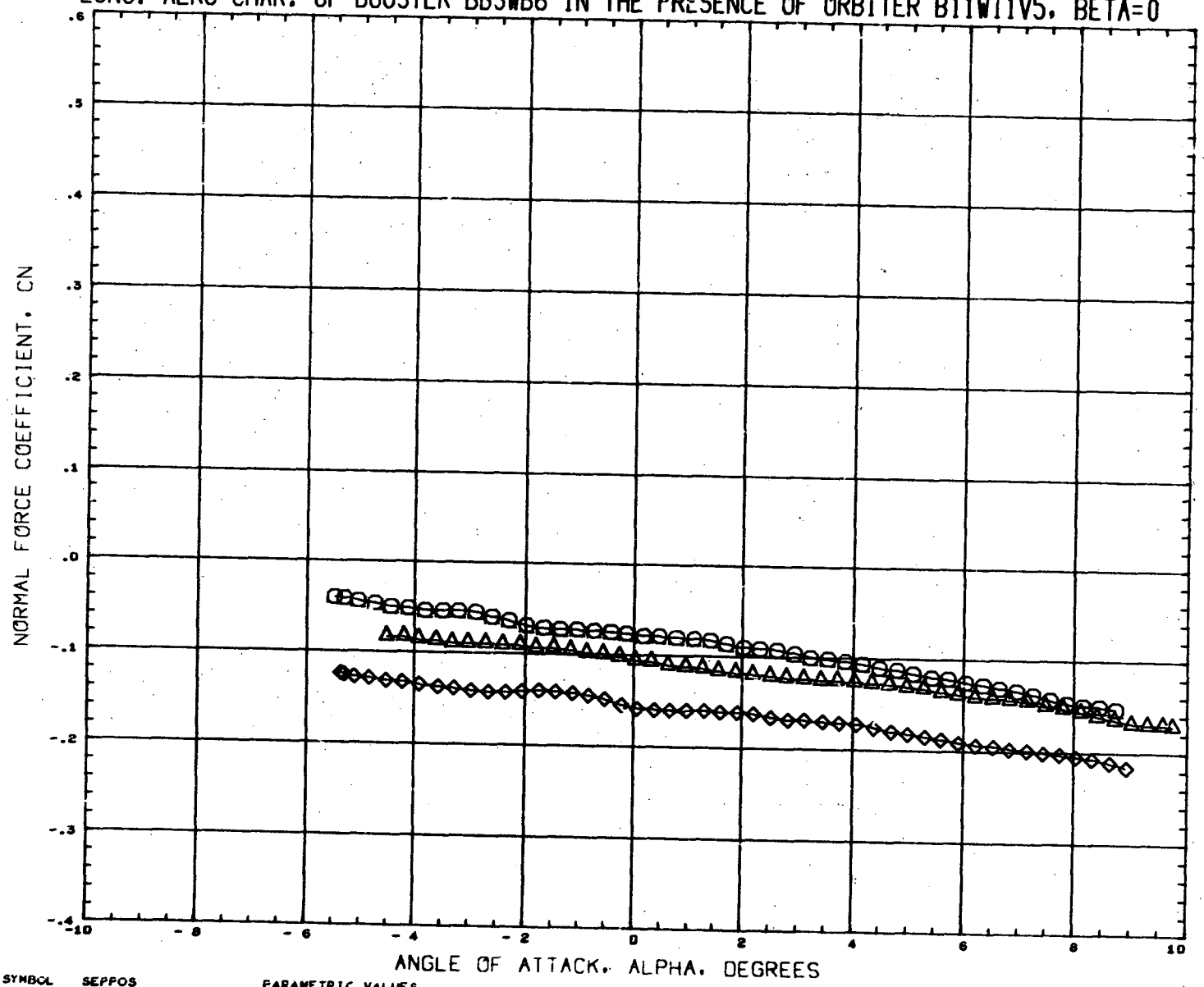
BETA	-	0.026	MACH		1.100
ALFB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

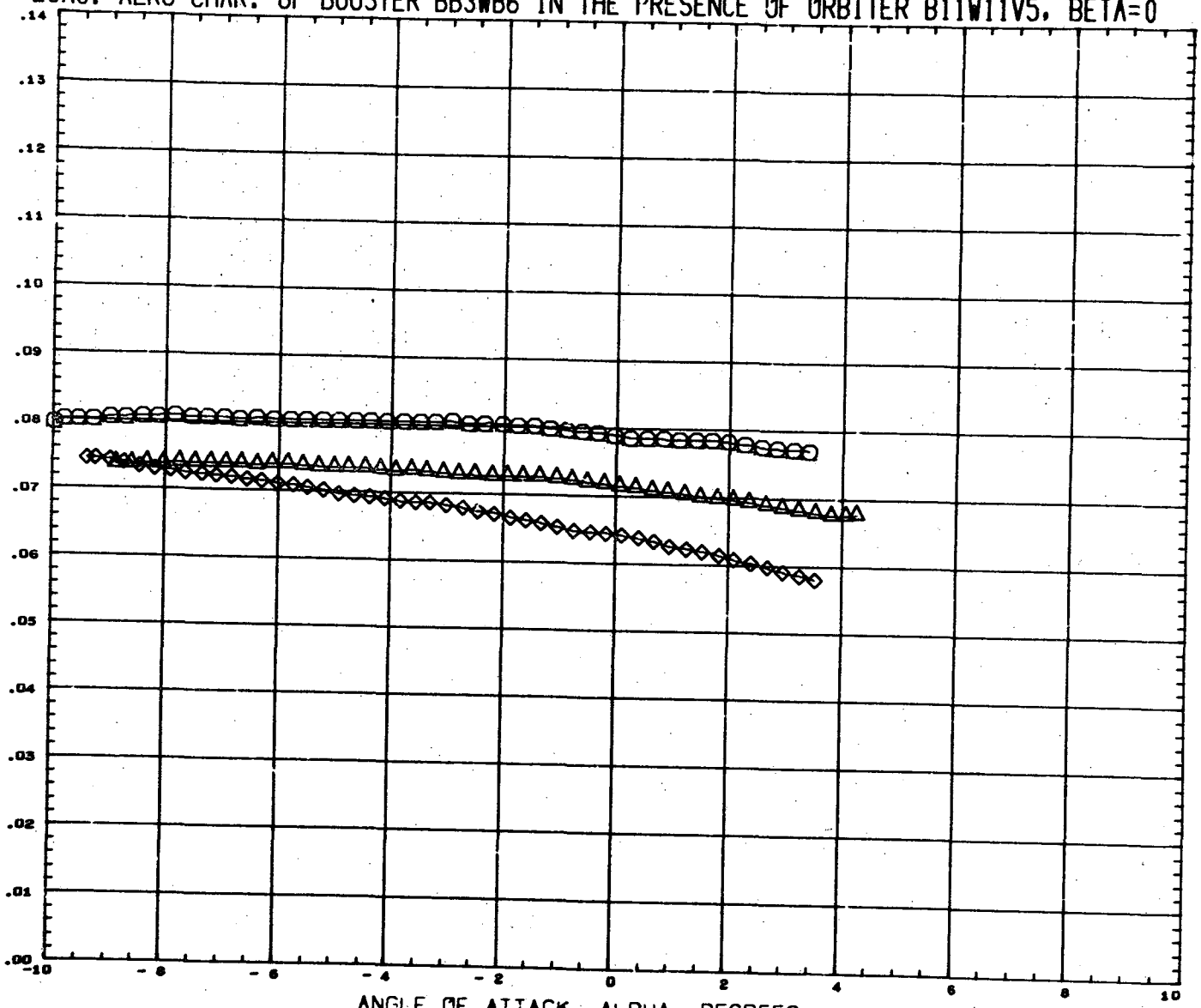
BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0

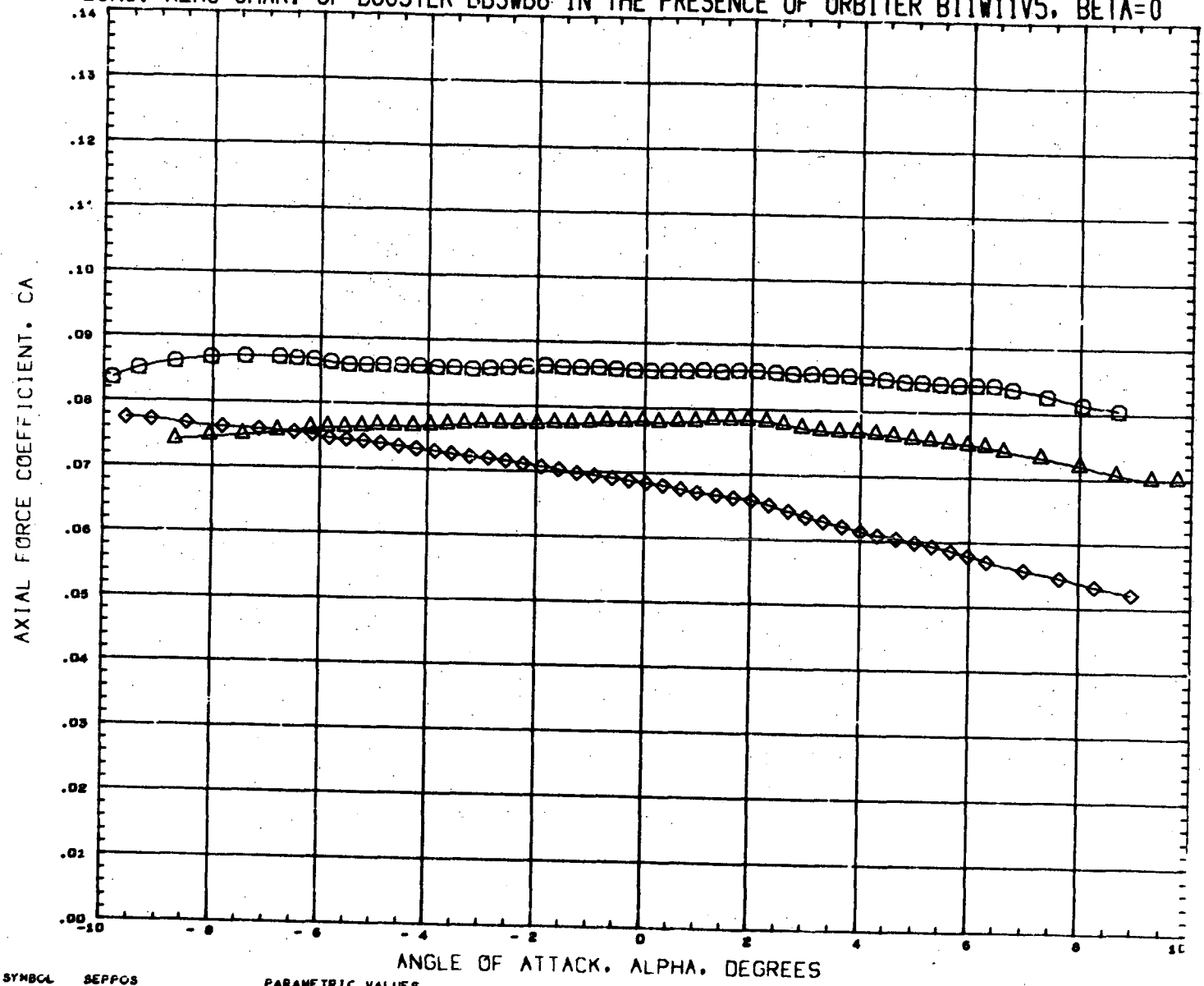


SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.026	MACH	1.100
△	0.005	ALPB	- 5.257	BETB	- 0.016
◇	0.006				

REFERENCE FILE .0000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8900	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
⊠	0.008
◇	0.009

PARAMETRIC VALUES

BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

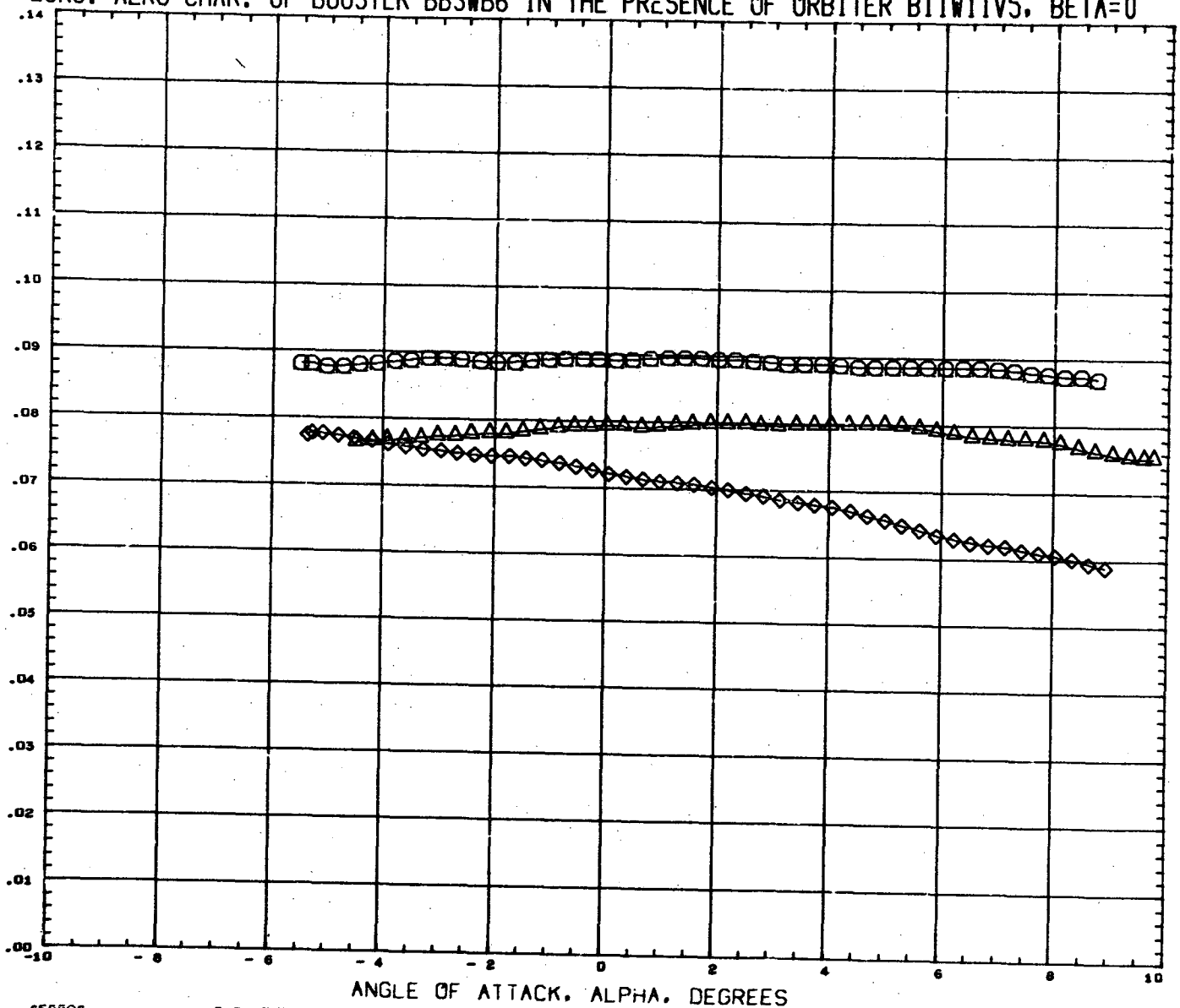
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU055) 21 JUN 71 PAGE 200

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	-	0.026	MACH		1.100
ALPB	-	5.257	BETB	-	0.016

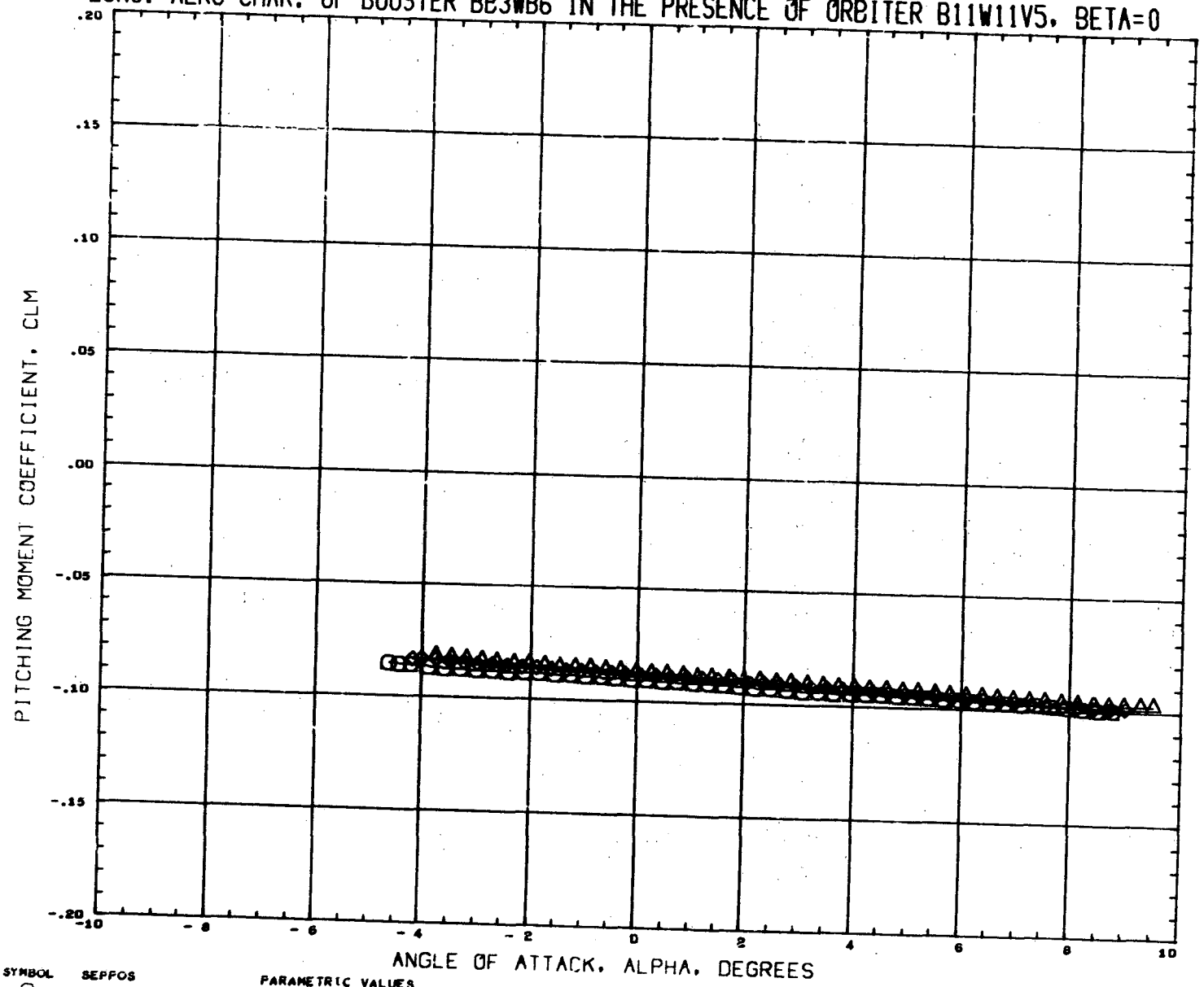
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU055) 21 JUN 71 PAGE 201

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
△	0.004
○	0.005
◇	0.006

PARAMETRIC VALUES

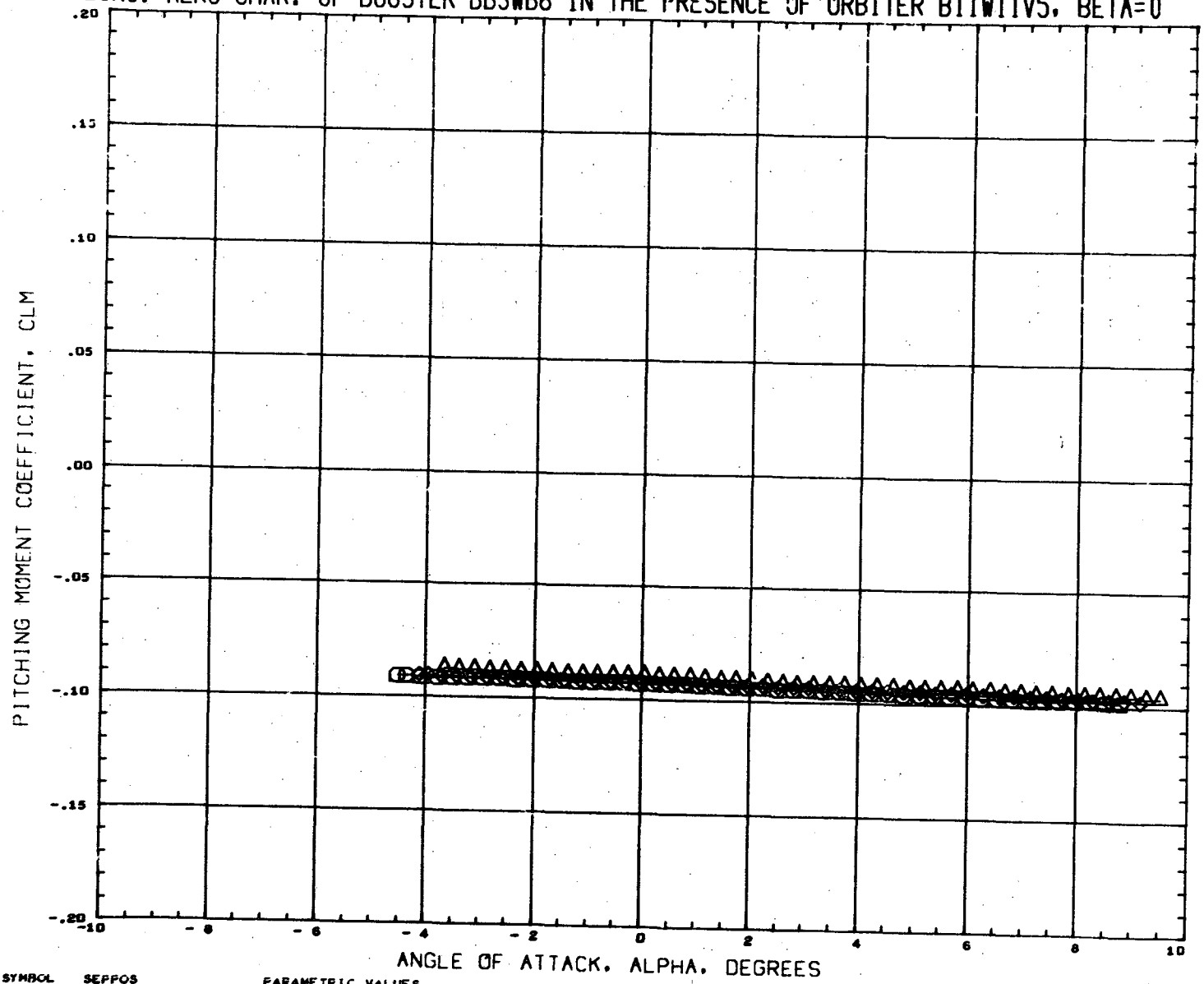
BETA	- 0.021	MACH	1.100
ALPB	3.901	BETB	- 0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3710	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

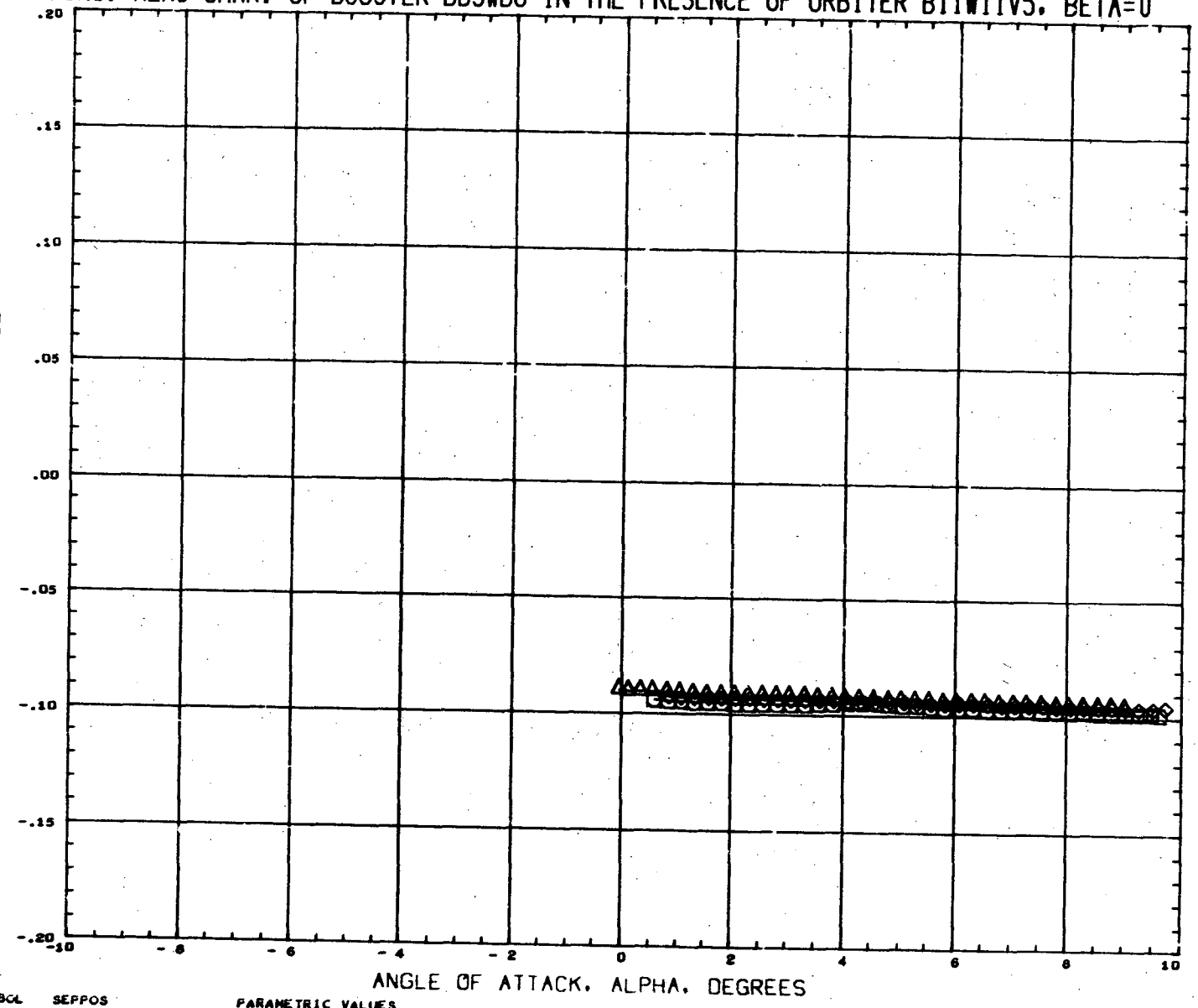
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

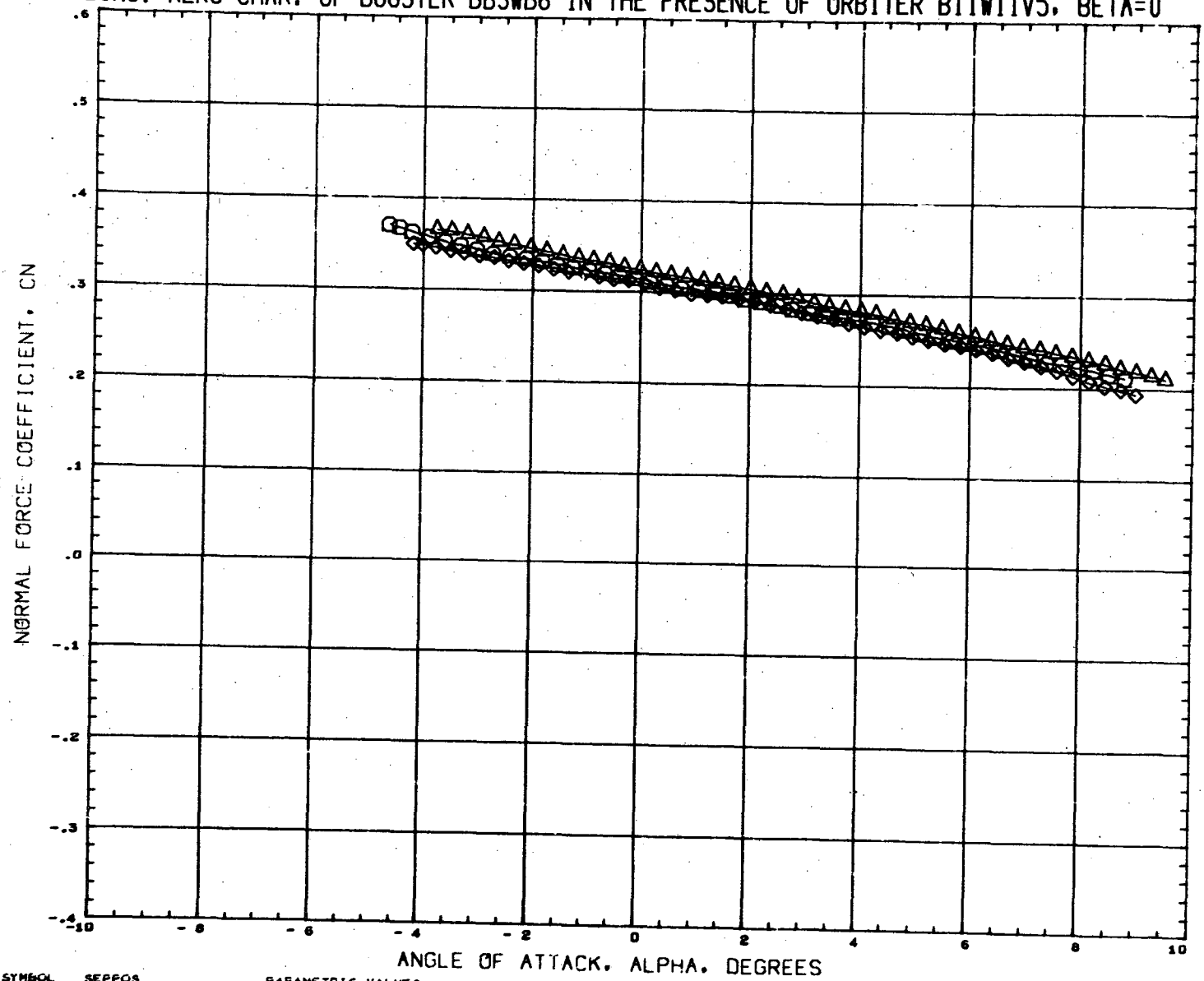
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

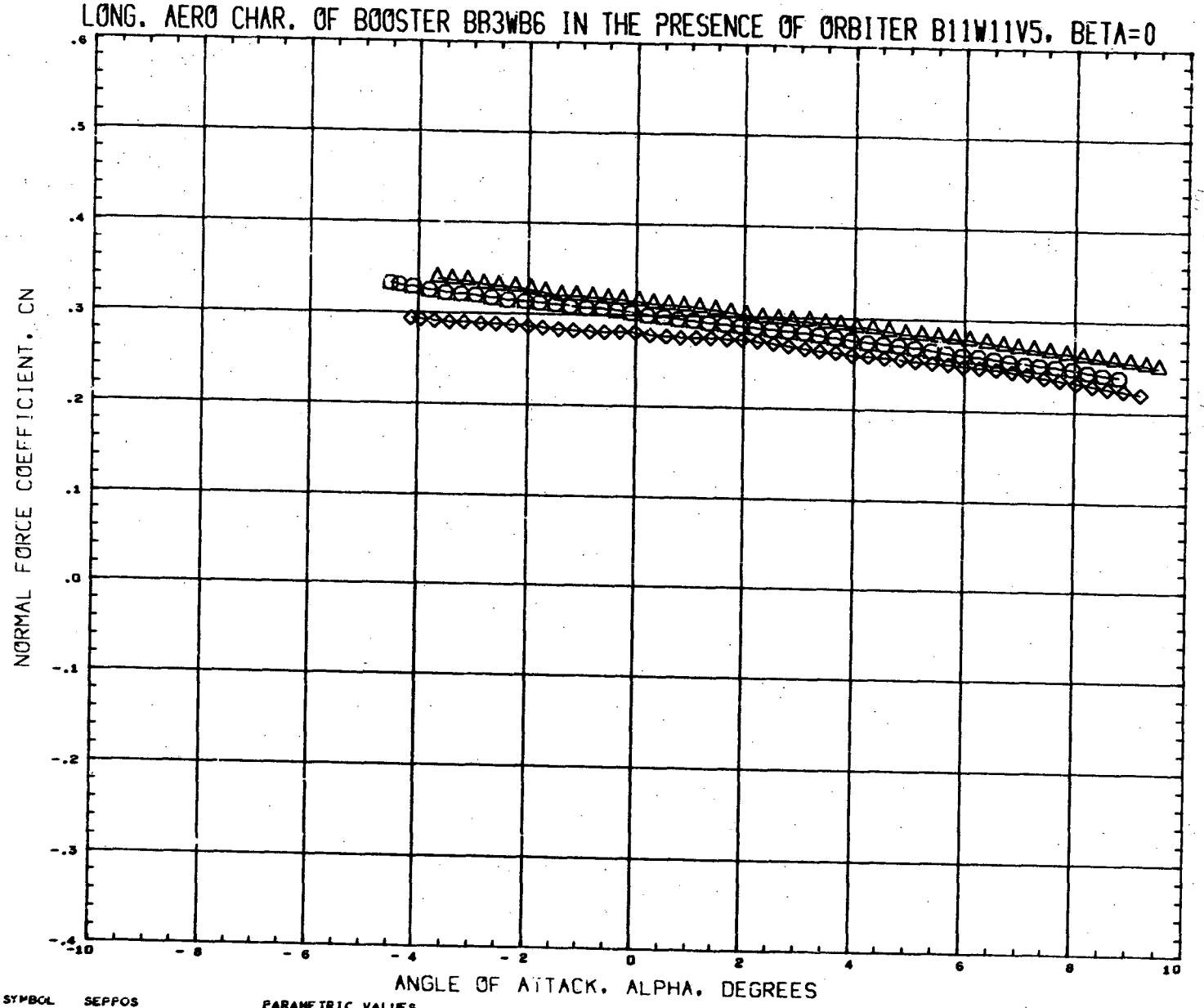
PARAMETRIC VALUES

BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



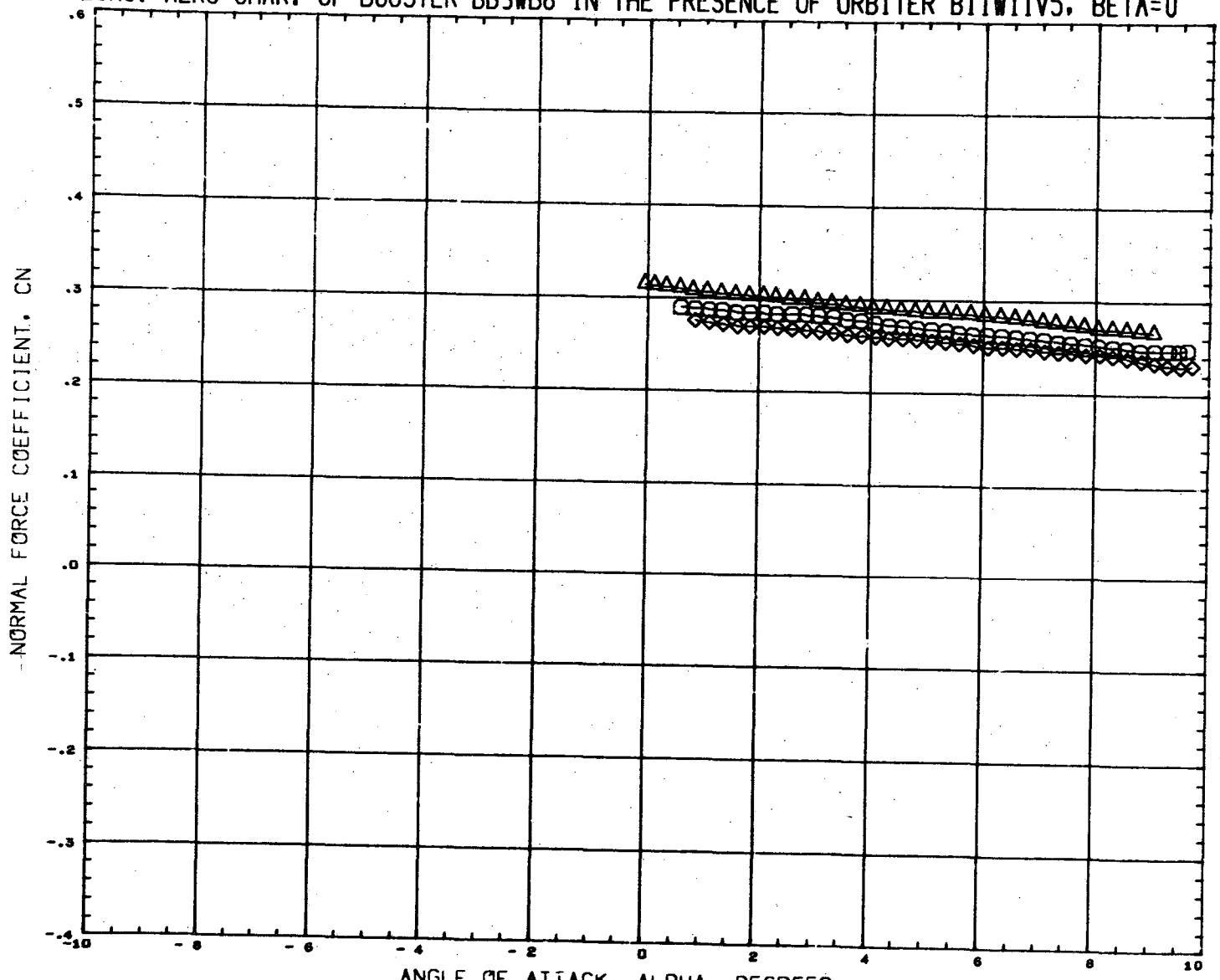
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.007	BETA	- 0.021	MACH	1.100	
△	0.008	ALFB	3.901	BETB	- 0.008	
◇	0.009					

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

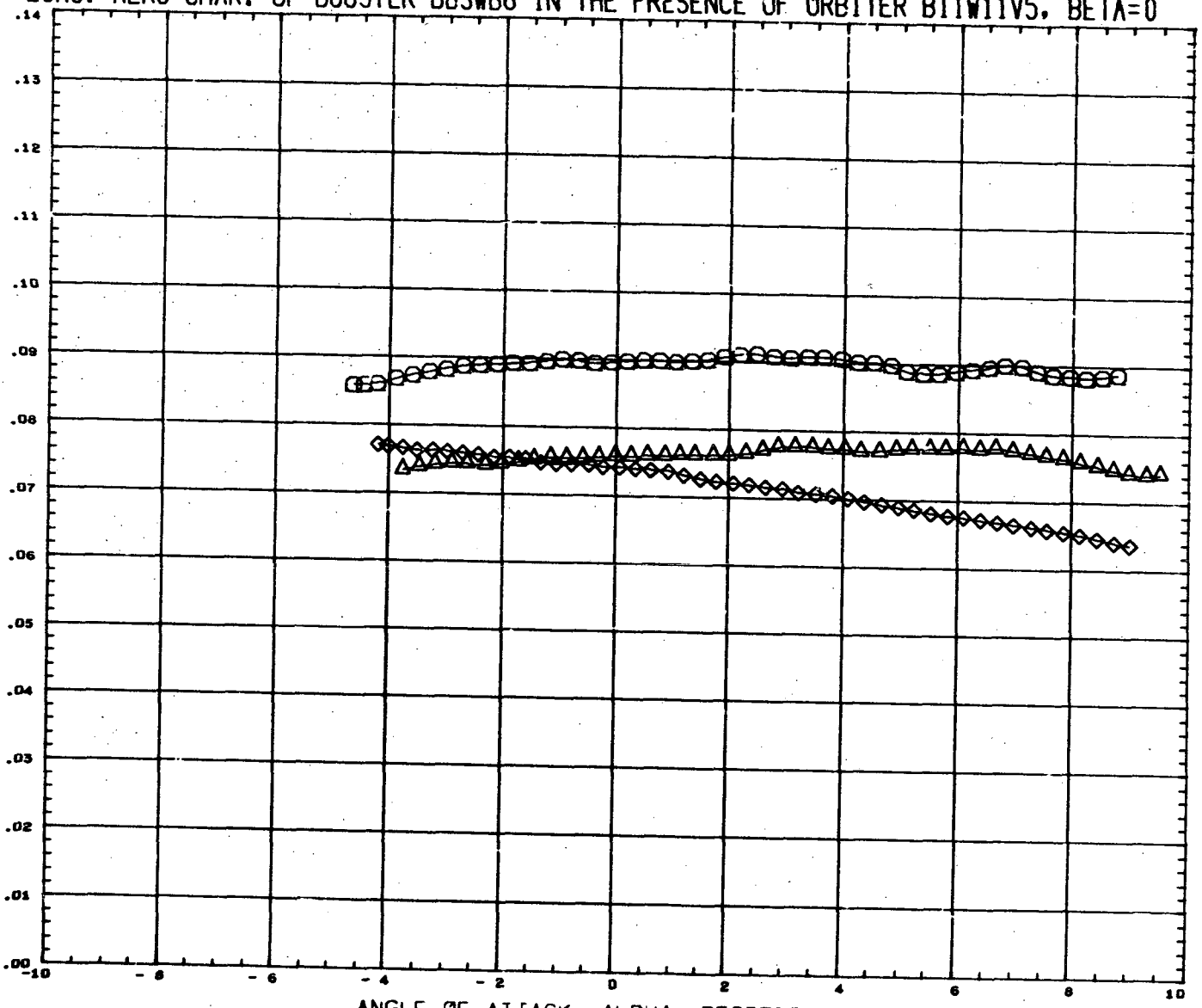
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

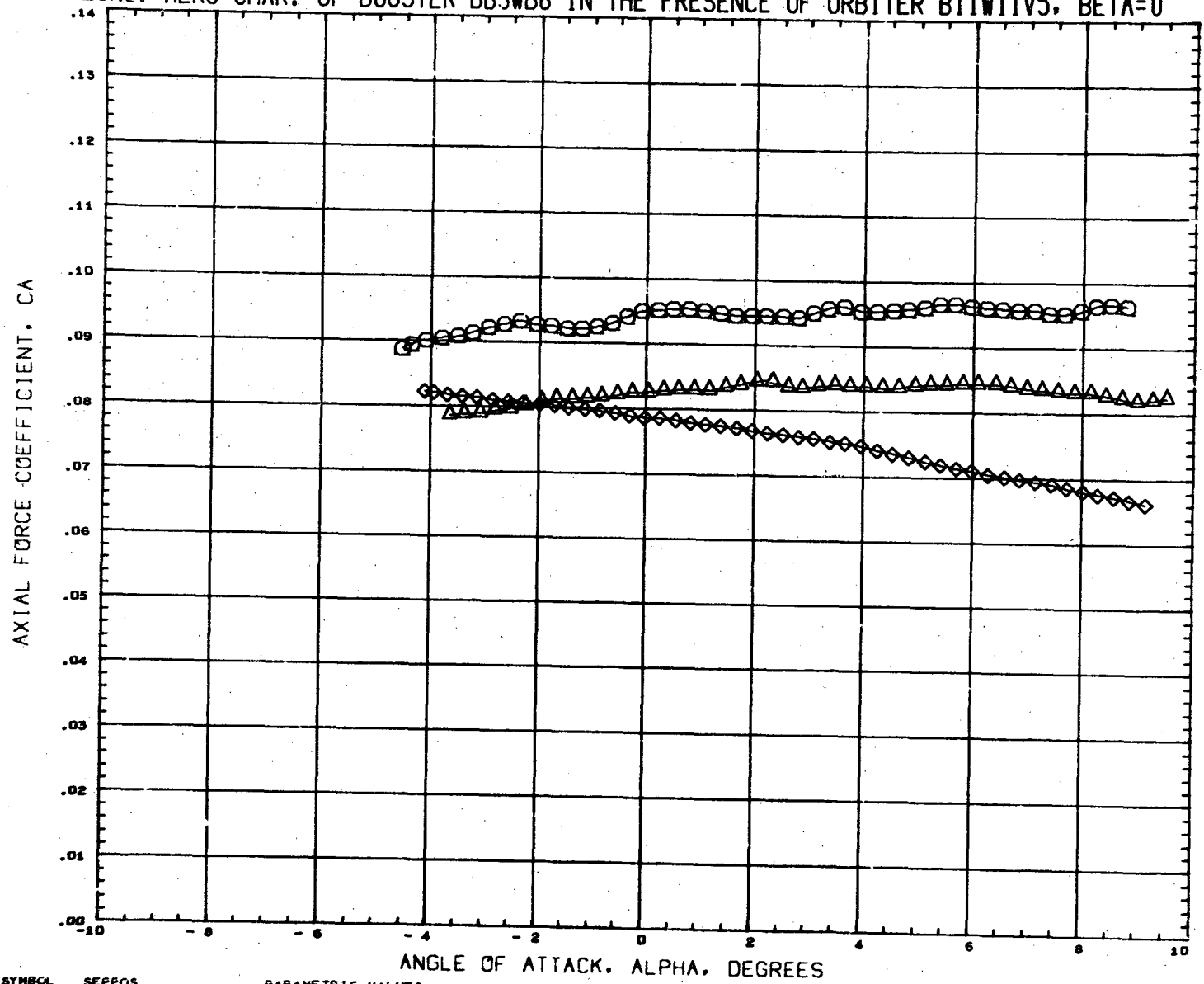
BETA	-	0.021	MACH		1.100
ALFB		3.901	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

BETA	-	0.021	MACH		1.100
ALFB		3.901	BETB	-	0.008

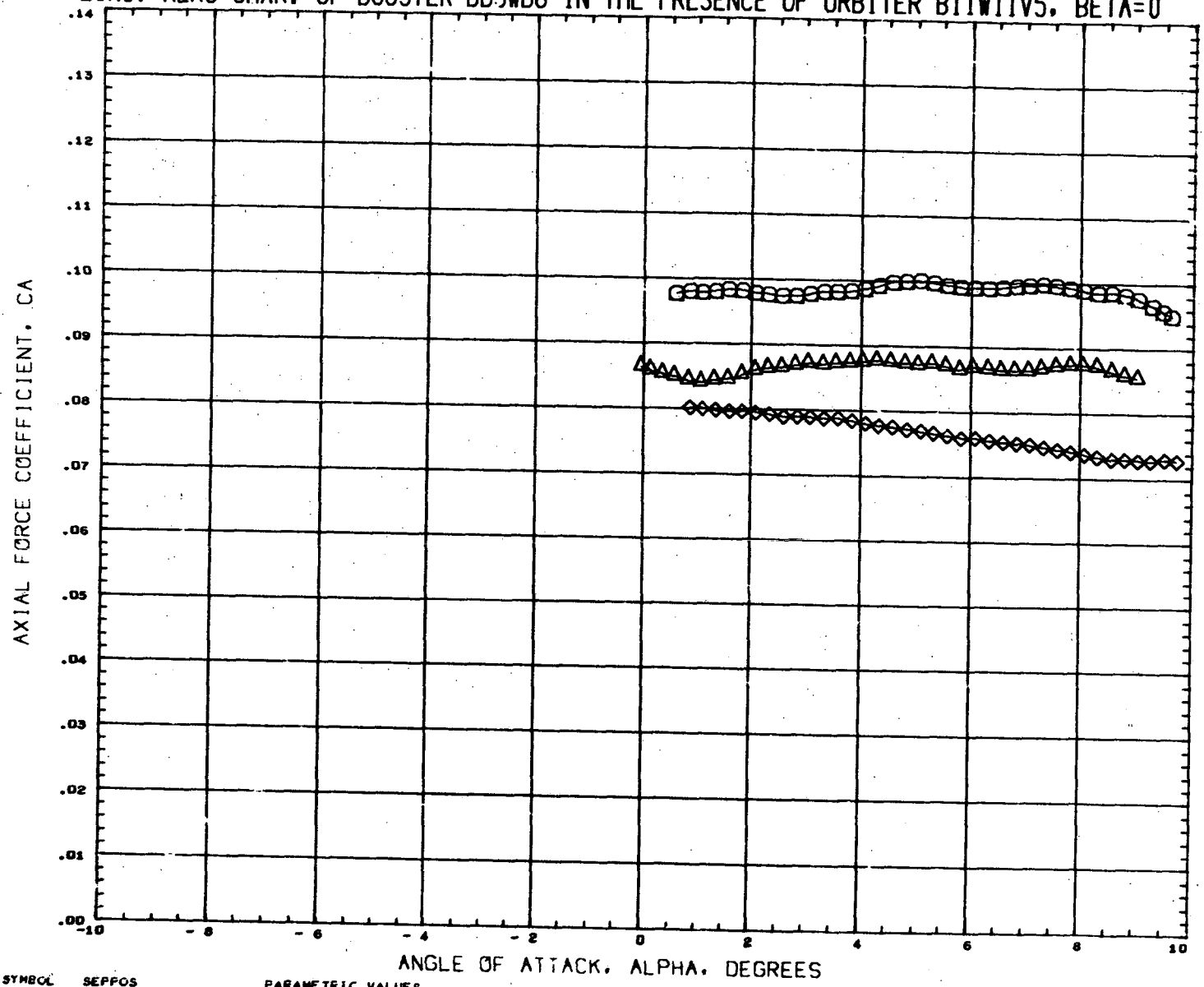
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU054) 21 JUN 71 PAGE 209

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

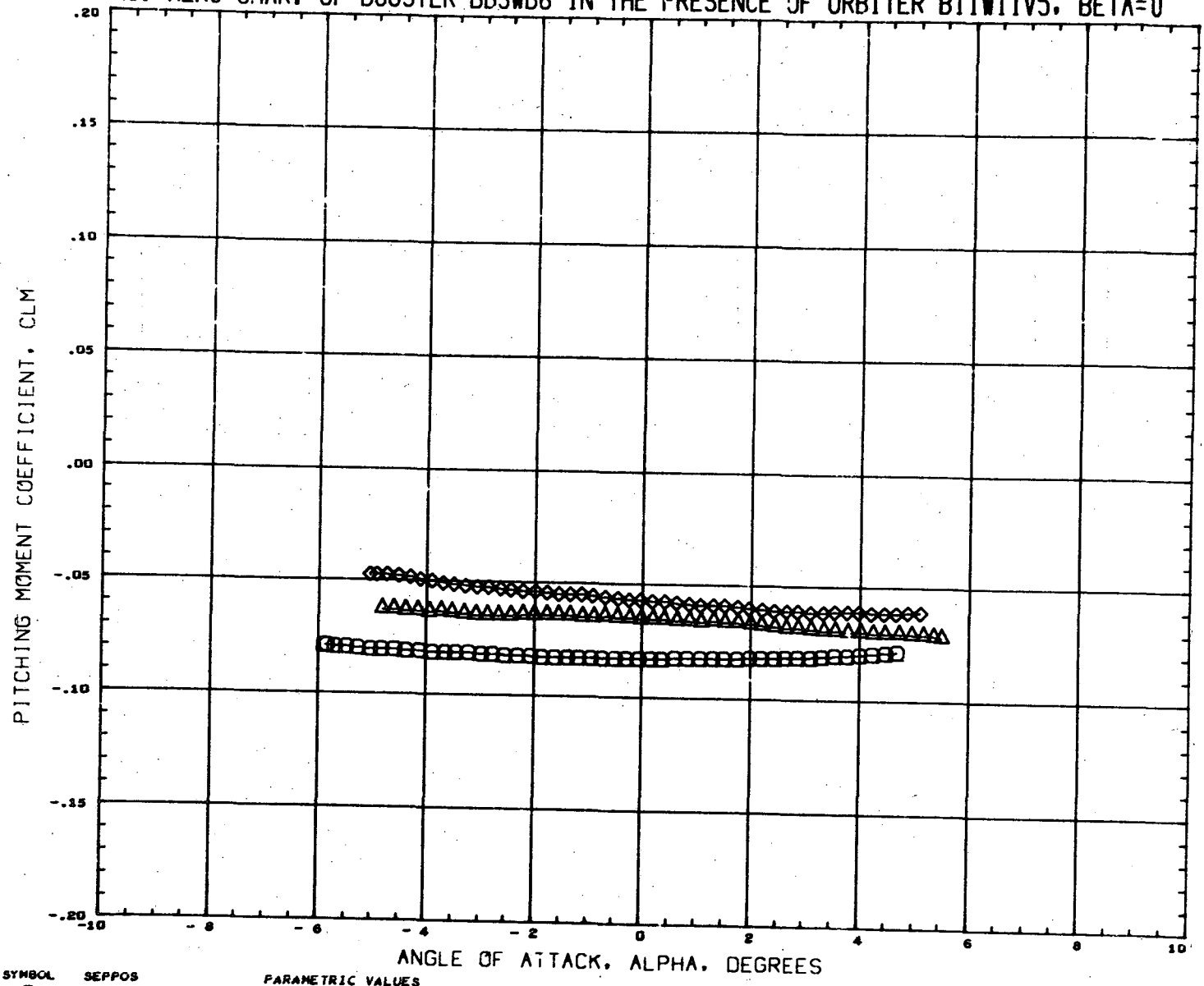
BETA	-	0.021	MACH		1.100
ALPB		3.901	BETB	-	0.008

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



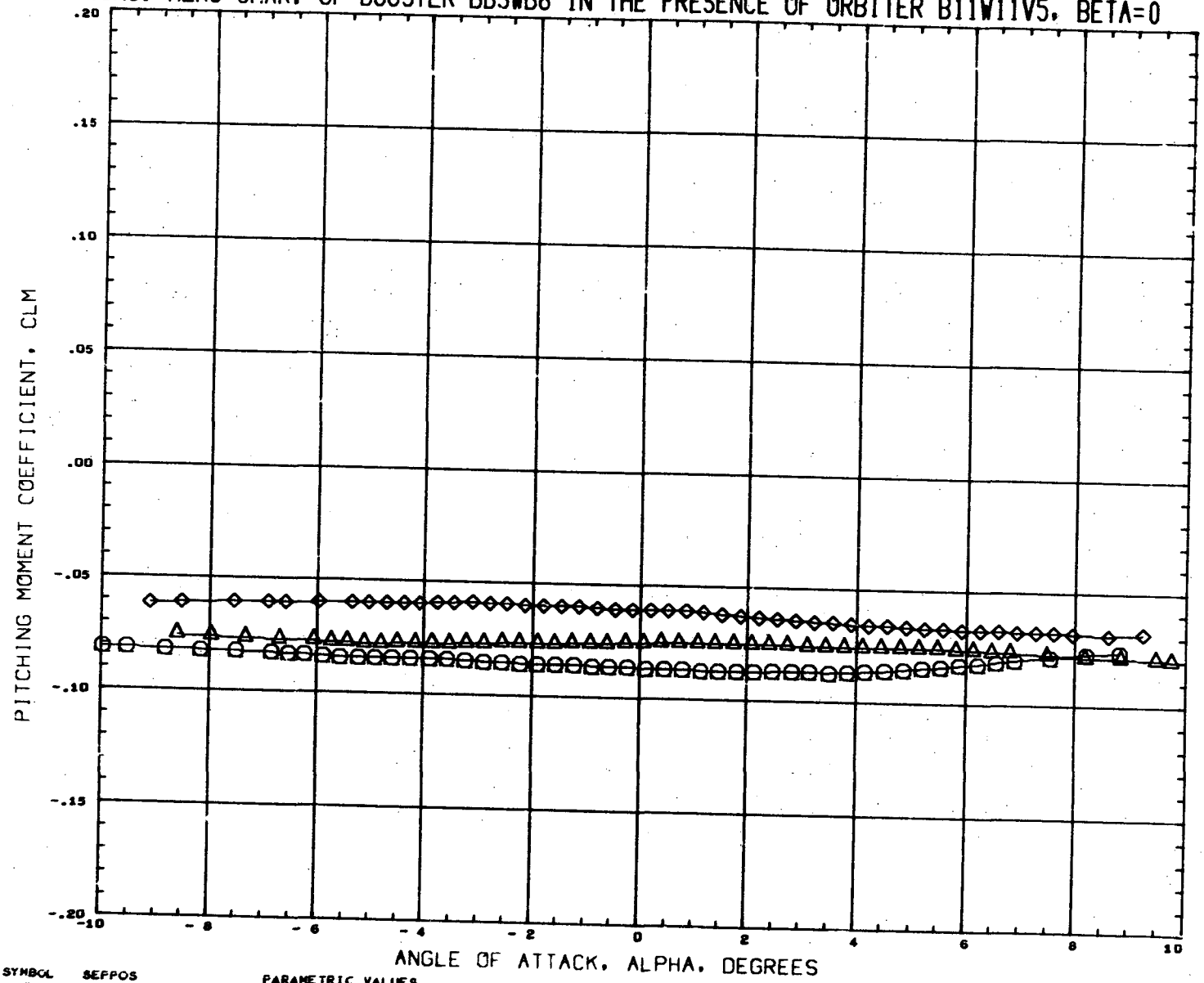
SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.001	BETA	- 0.034	MACH	1.370	
△	0.002	ALPB	0.144	BETB	- 0.012	
◇	0.003					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

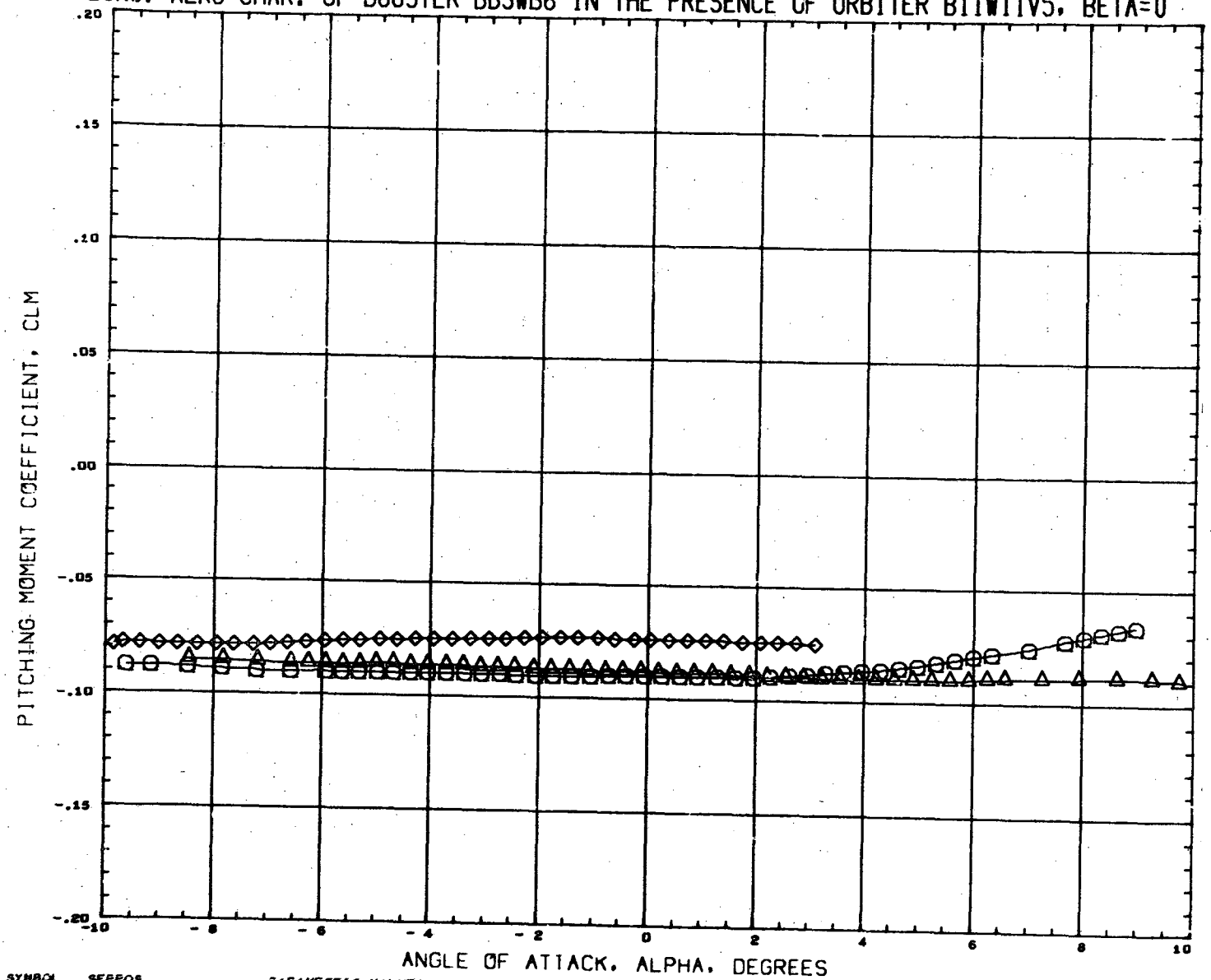
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU068) 21 JUN 71 PAGE 212

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

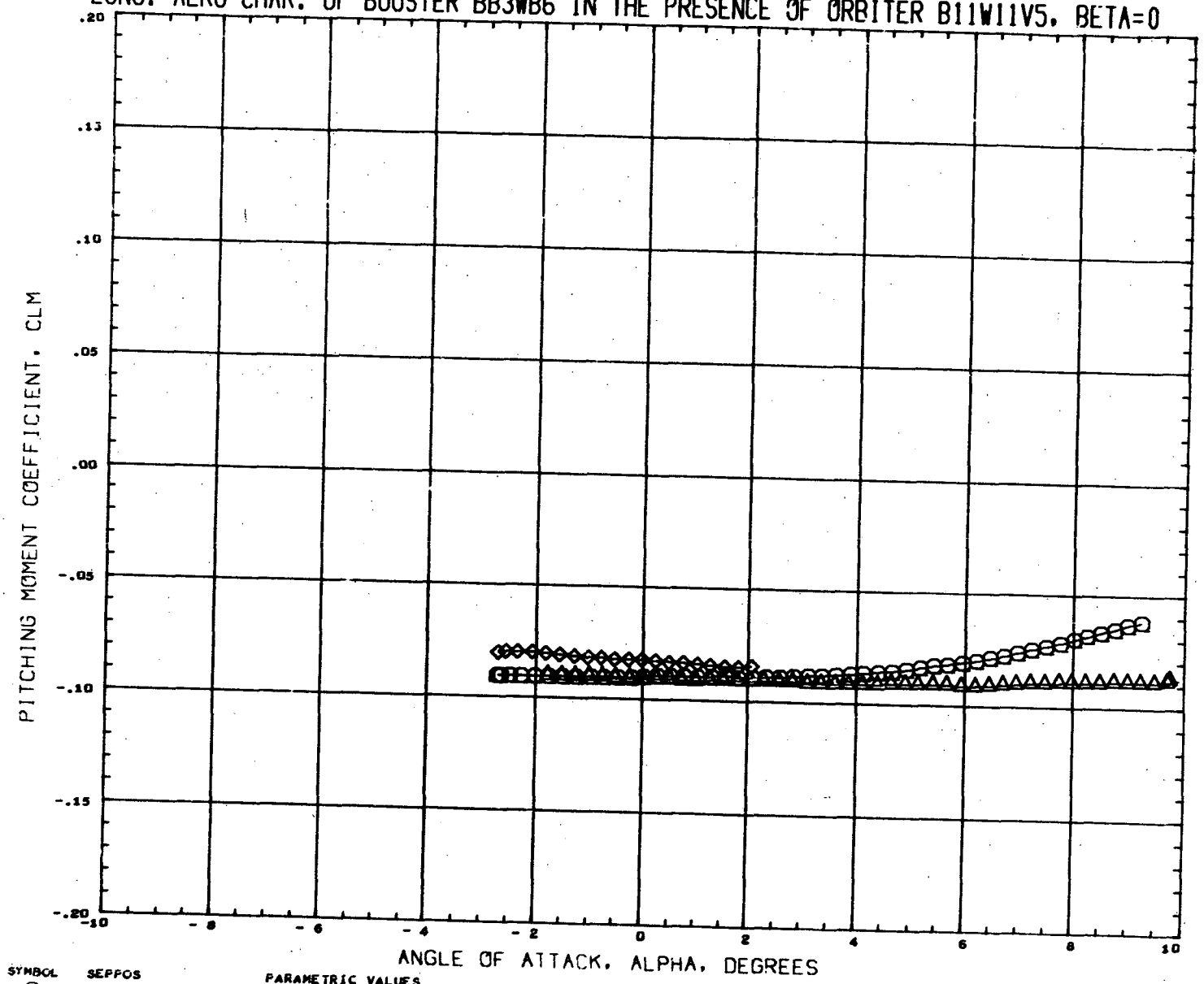
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.37+0	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

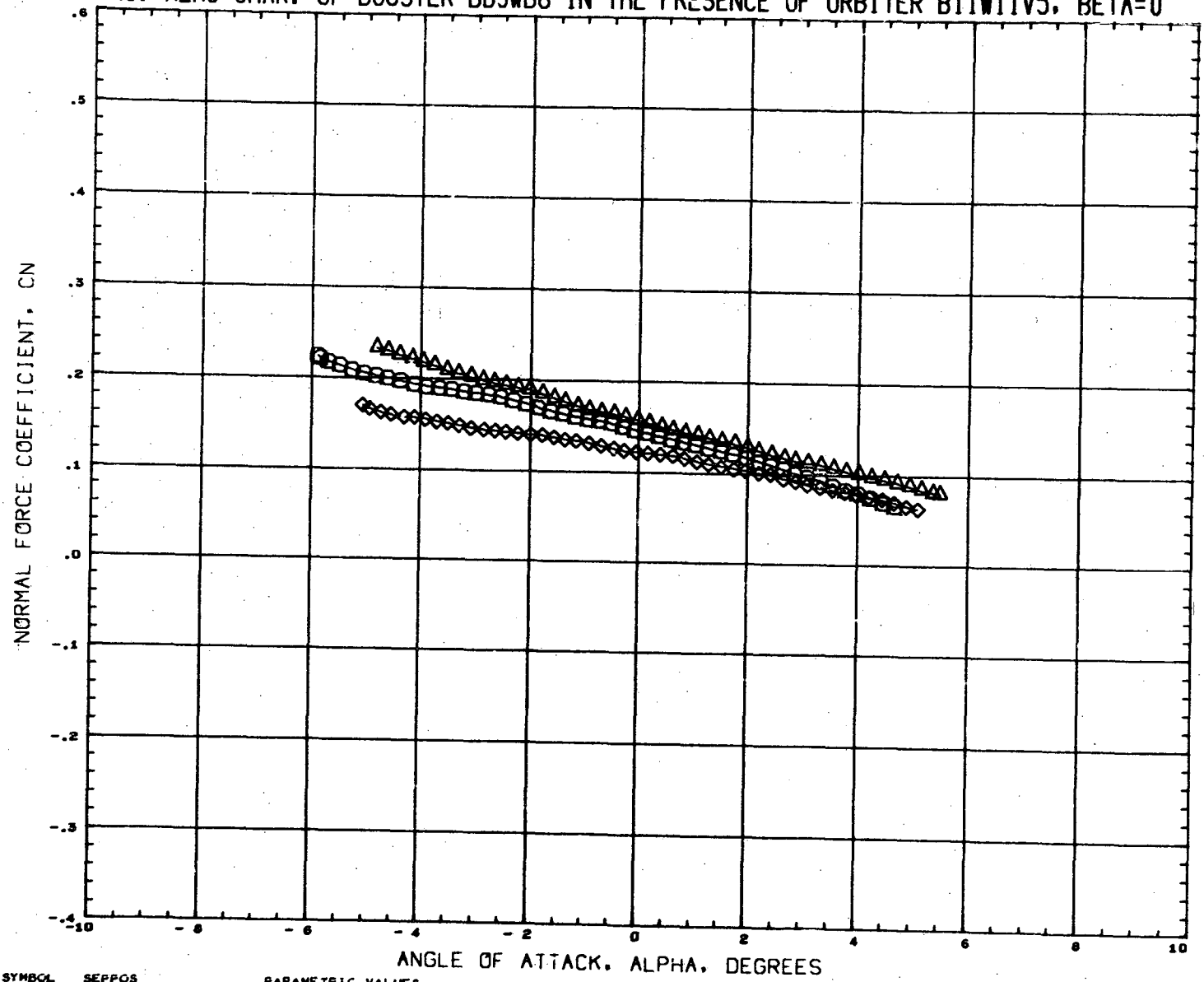
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.6990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
△	0.001
○	0.002
◇	0.003

PARAMETRIC VALUES

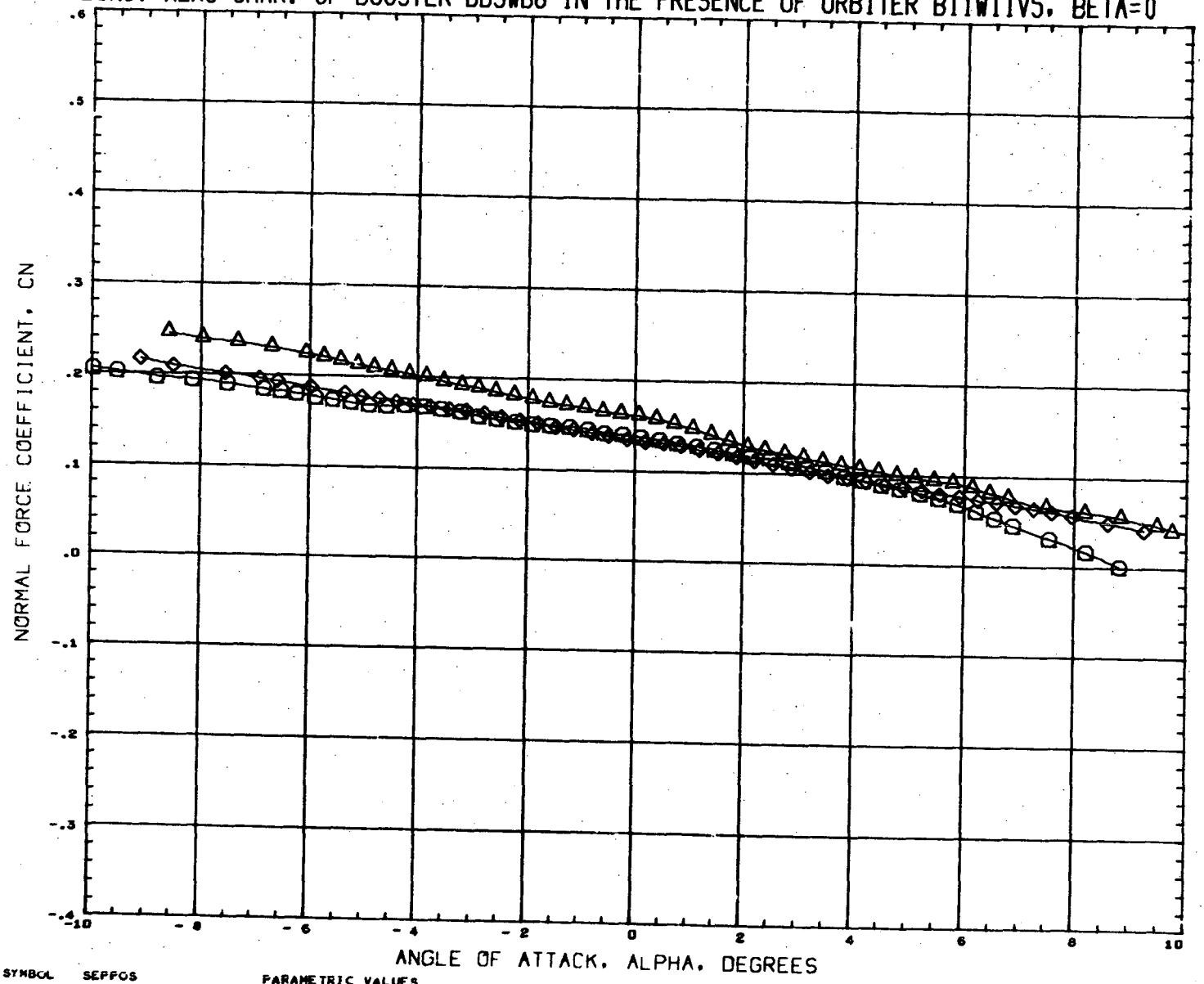
BETA	- 0.034	MACH		1.370
ALFB	0.144	BETB	-	0.012

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0

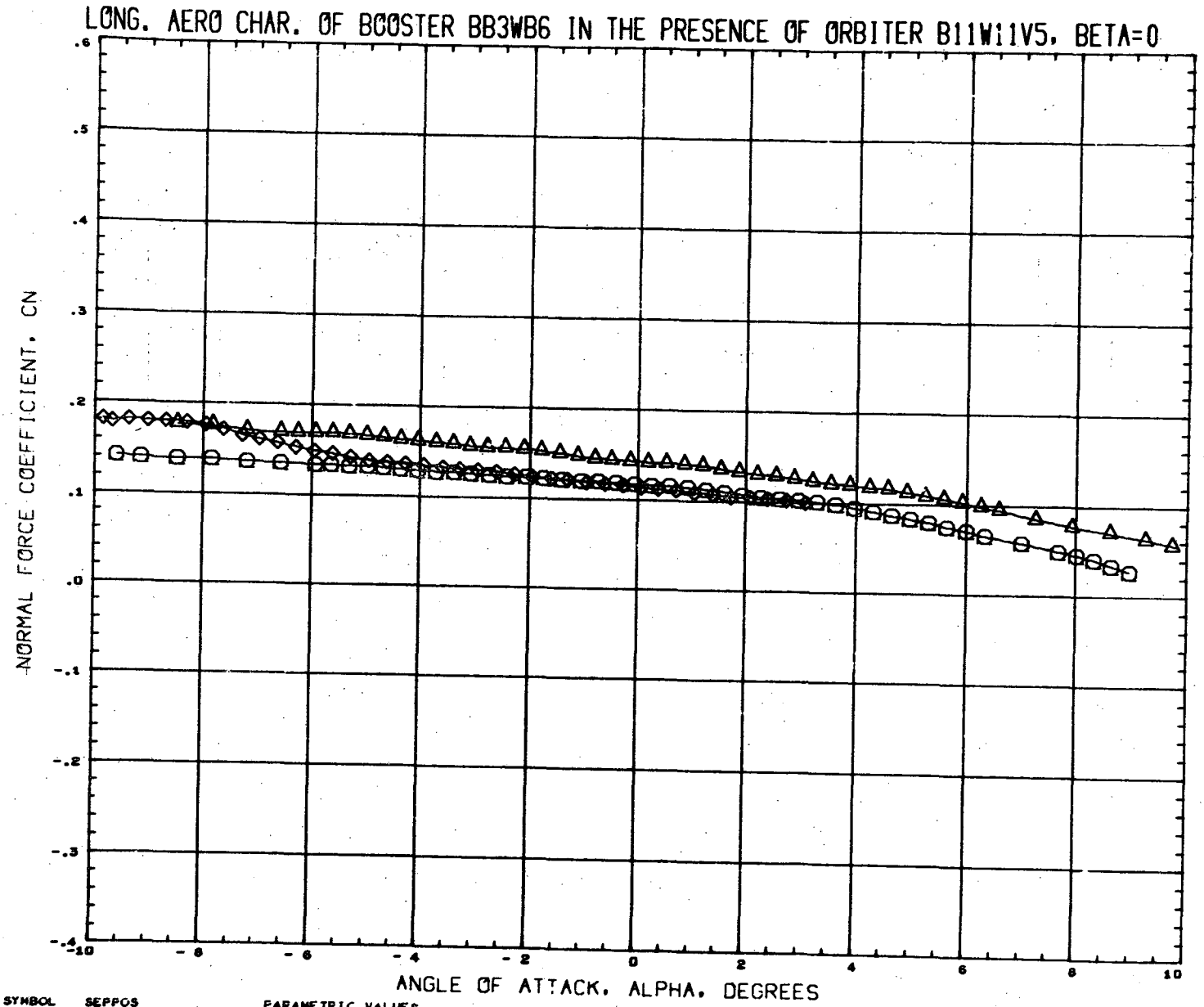


SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.004	BETA	- 0.034	MACH		1.370
△	0.005	ALPB	0.144	RETB	-	0.012
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



SYMBOL	SEPPOS
○	0.007
△	0.006
◇	0.009

PARAMETRIC VALUES

BETA	-	0.034	MACH		1.370
ALFB		0.144	BETB	-	0.012

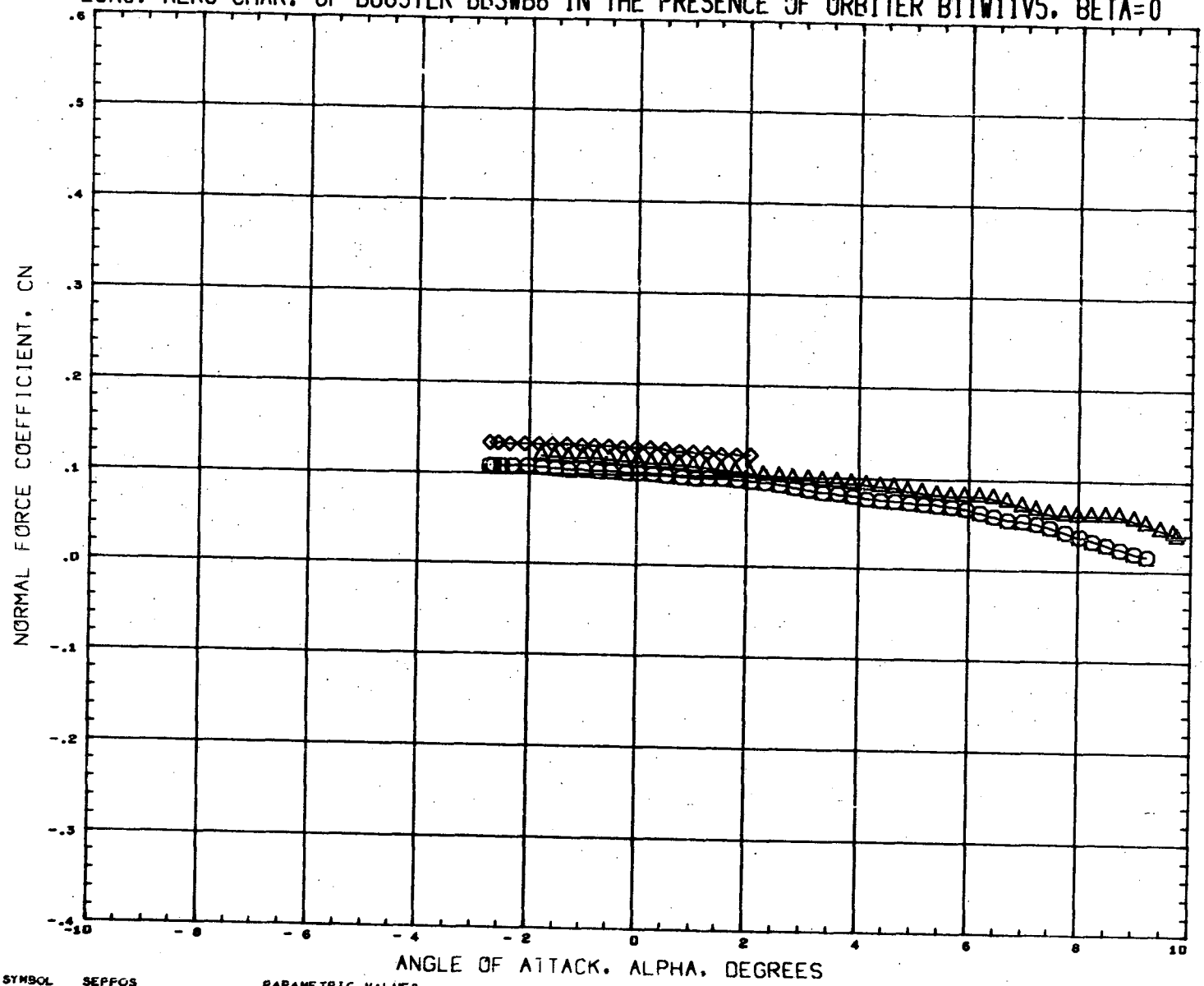
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8930	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU068) 21 JUN 71 PAGE 217

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPFOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

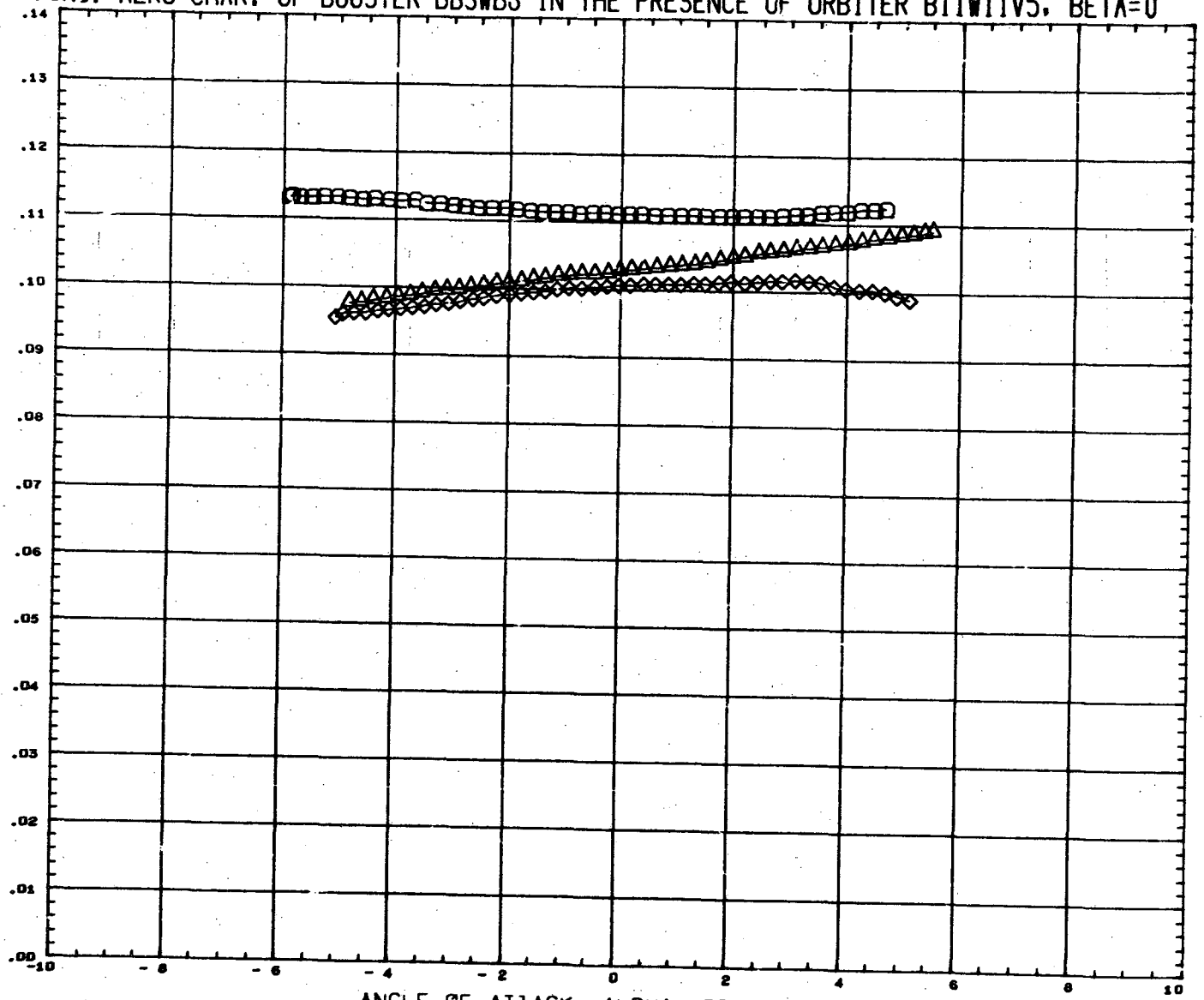
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB3 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.001
△	0.002
◇	0.003

PARAMETRIC VALUES

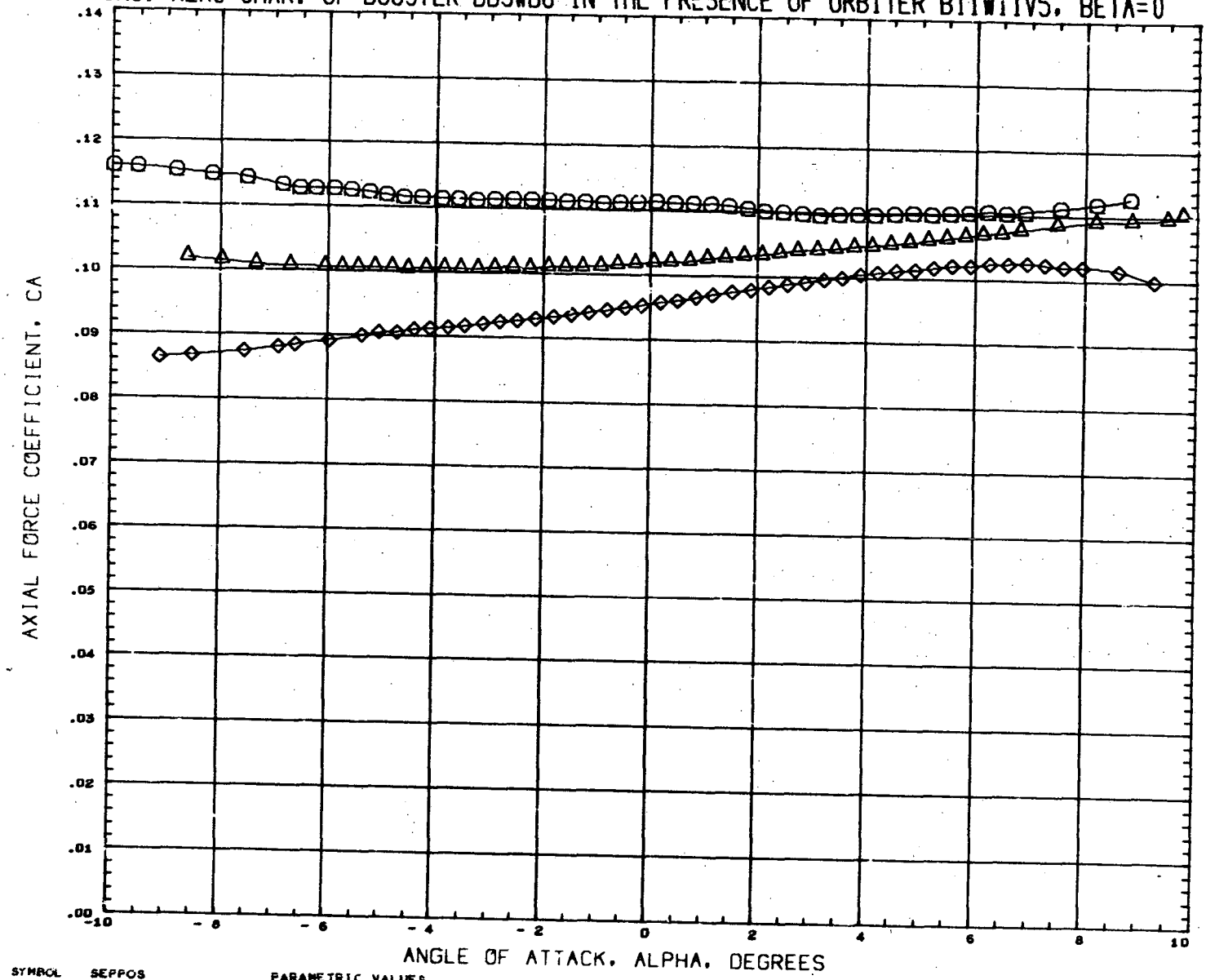
BETA	- 0.034	MACH		1.370
ALPB	0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
◇	0.004
△	0.005
○	0.006

PARAMETRIC VALUES

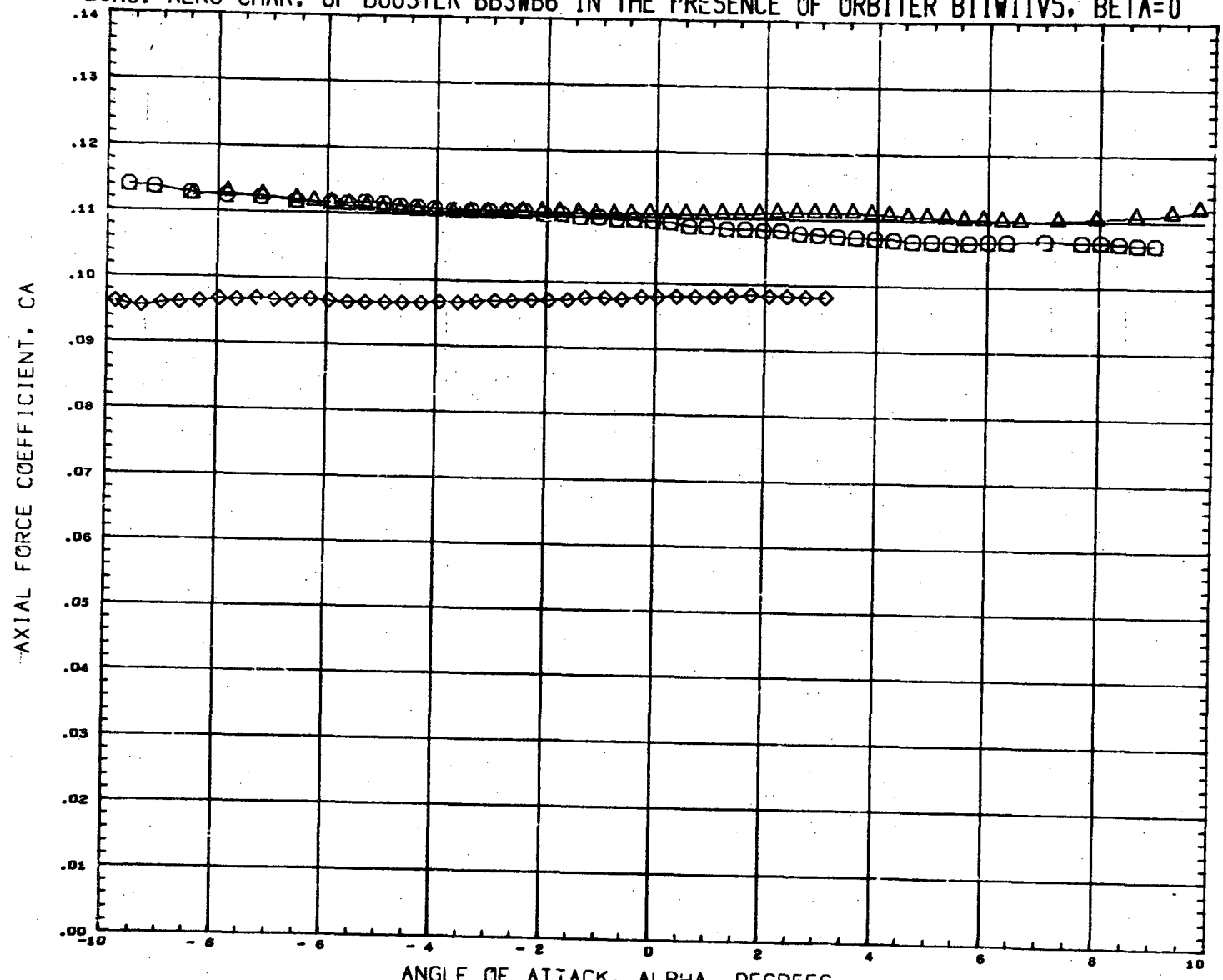
BETA	-	0.034	MACH		1.370
ALPB		0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

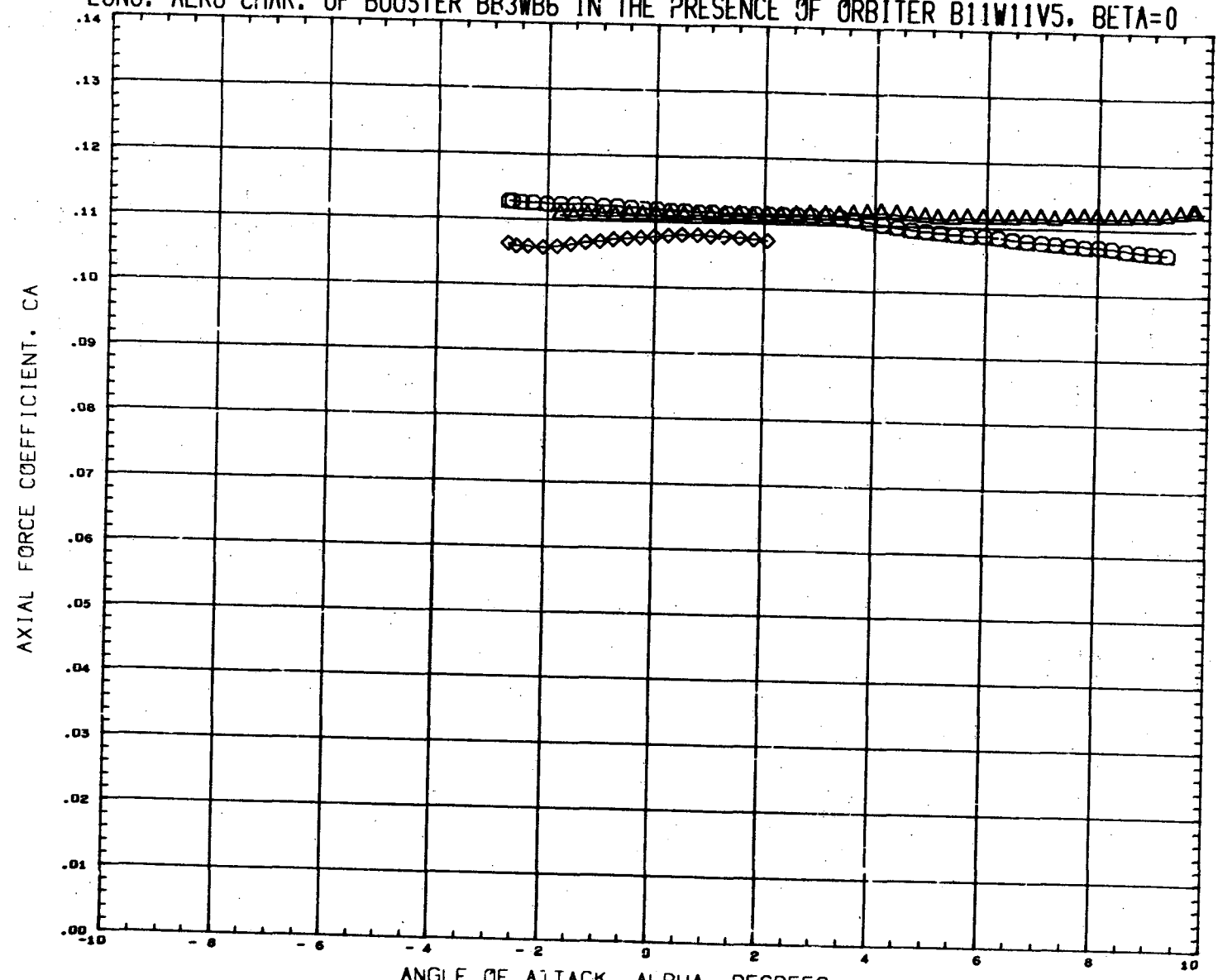
BETA	-	0.034	MACH		1.370
ALFB		0.144	BETB	-	0.012

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEFFOS
◇	0.010
△	0.011
○	0.012

PARAMETRIC VALUES

BETA	-	0.034	MACH		1.370
ALFB		0.144	BETB	-	0.012

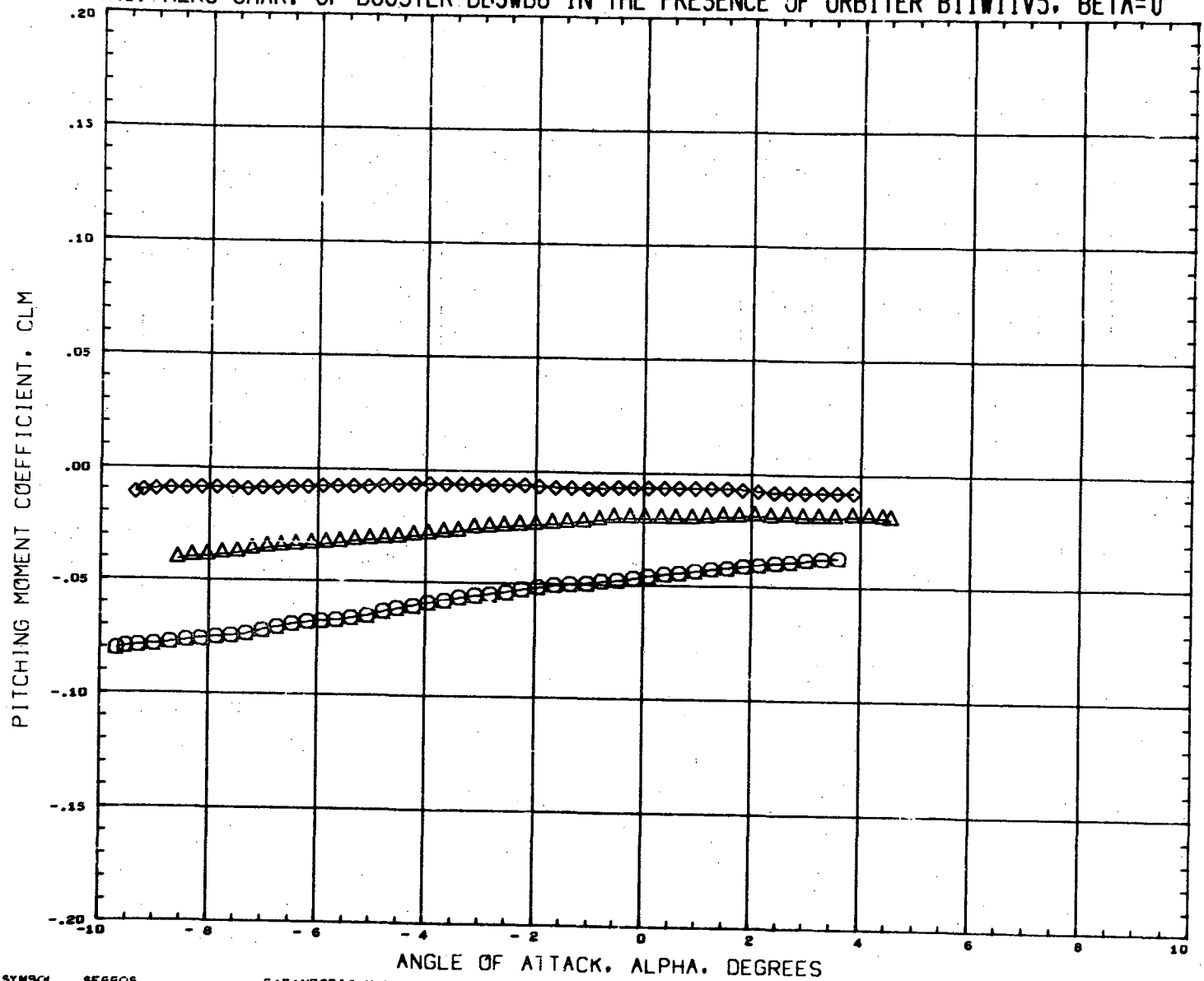
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRF	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU068) 21 JUN 71 PAGE 222

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEFFOS
◇	0.006
△	0.005
○	0.004

PARAMETRIC VALUES

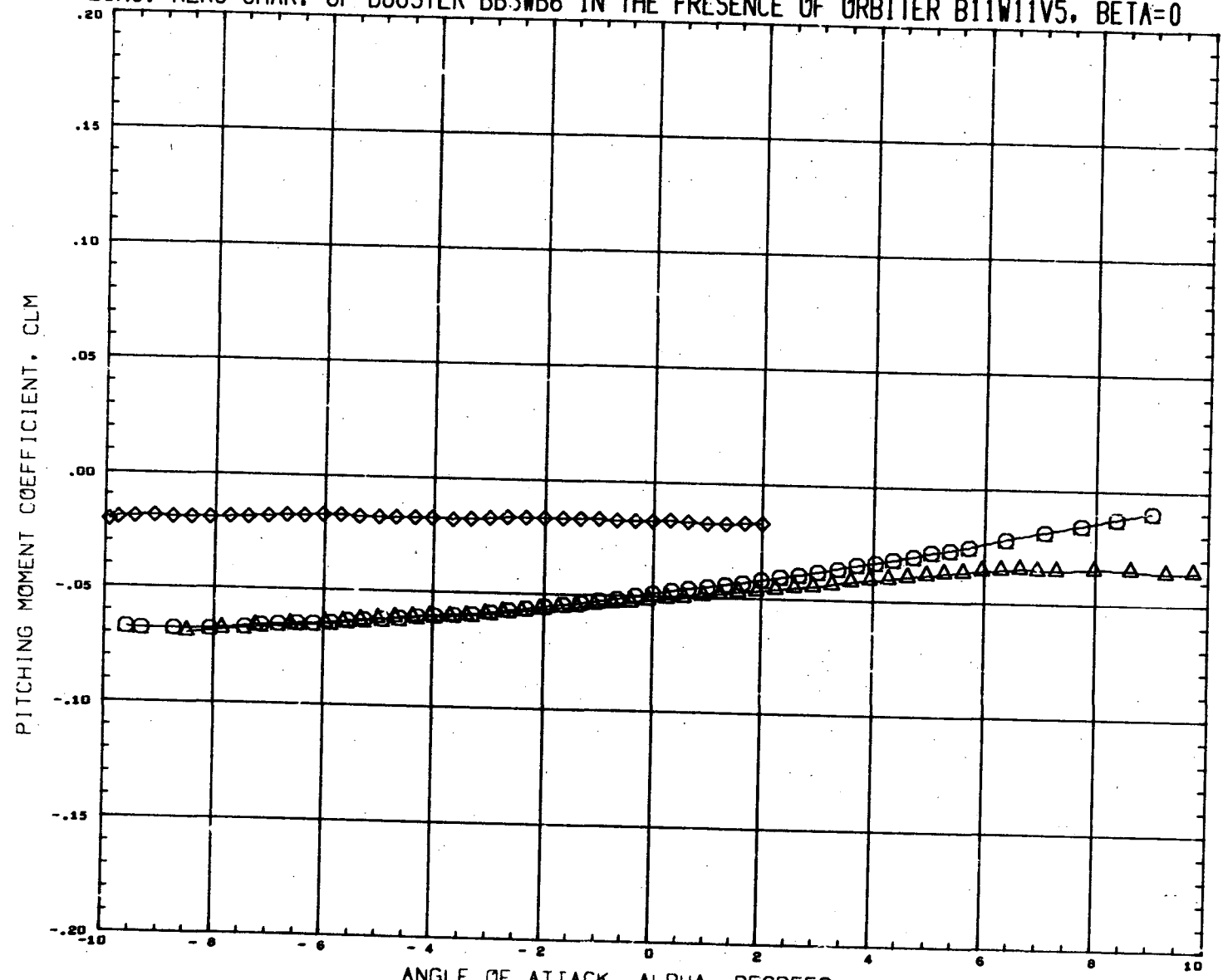
BETA	- 0.040	MACH	1.370
ALFB	- 5.340	BETB	- 0.013

REFERENCE INFORMATION

CREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

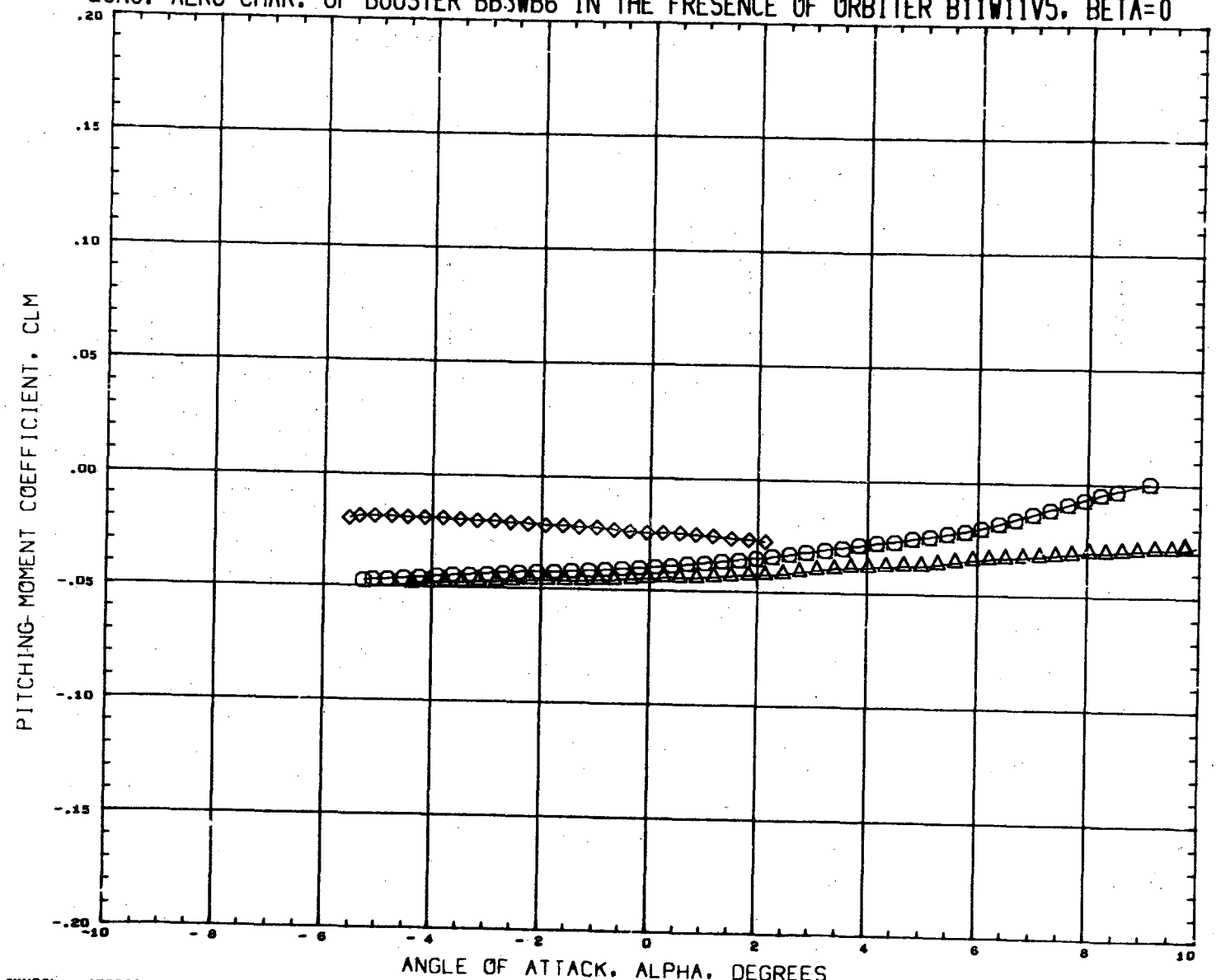
BETA	-	0.040	MACH		1.370
ALFB	-	5.340	BETB	-	0.013

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

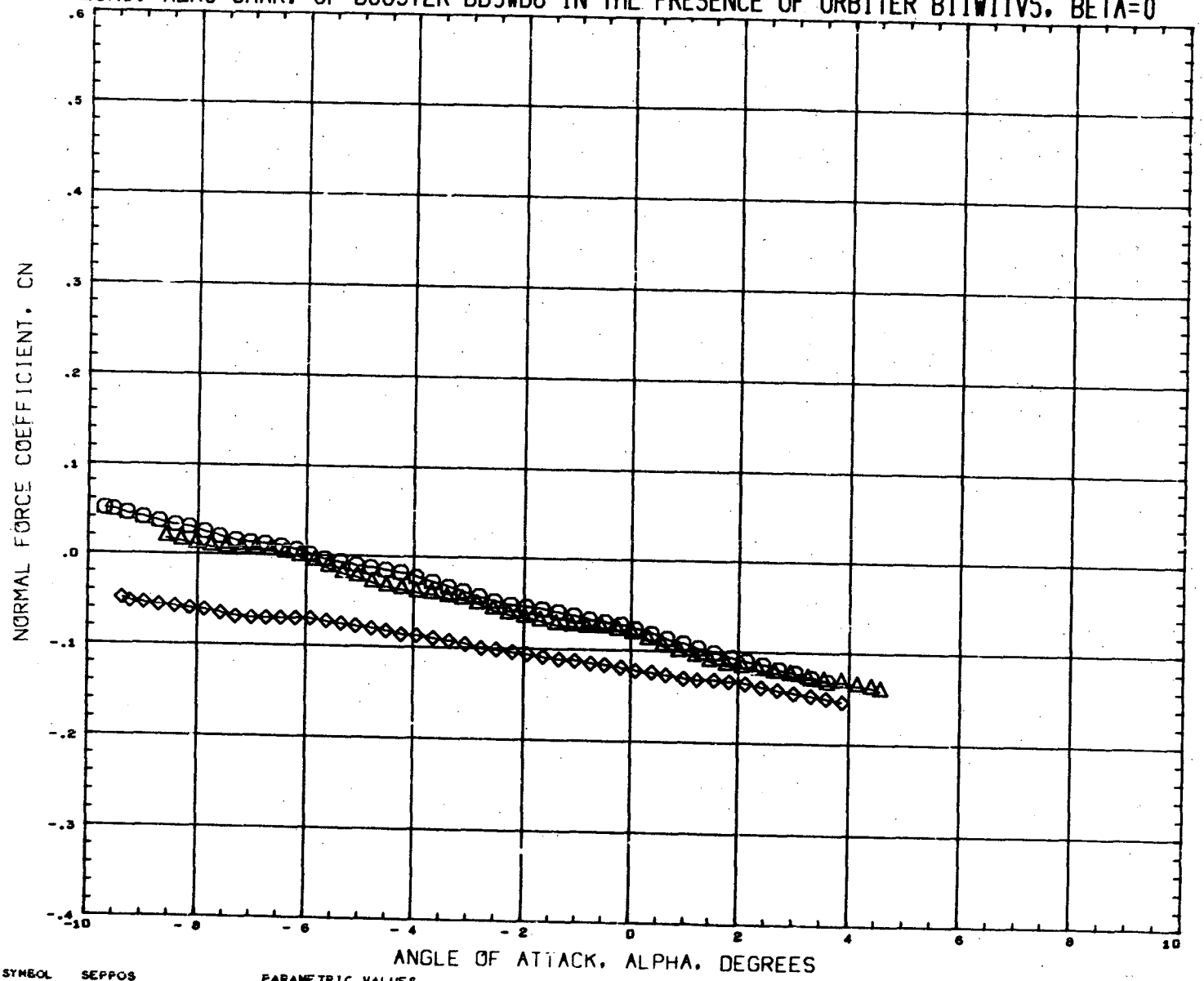
BETA	-	0.040	MACH		1.370
ALFB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0

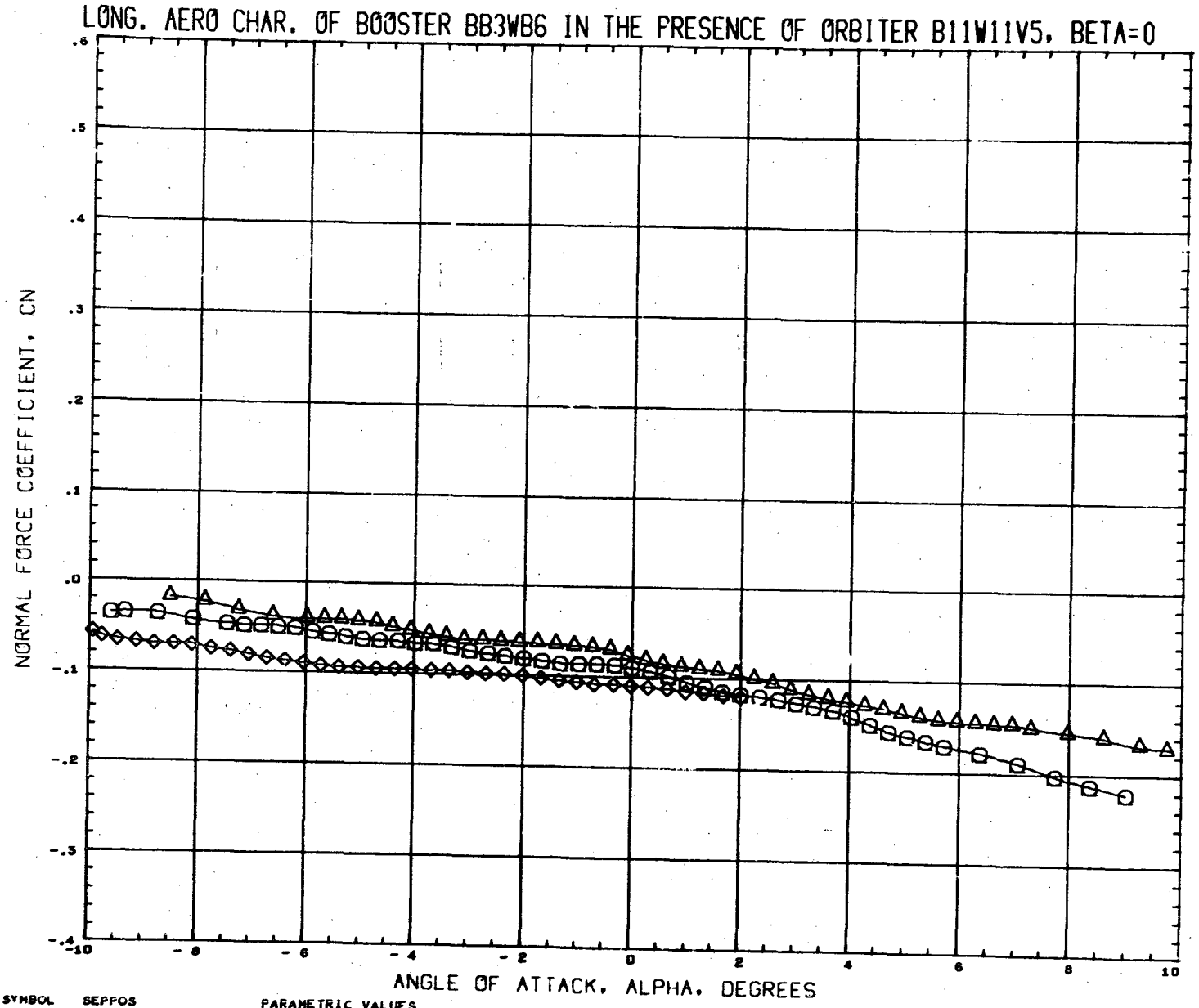


SYMBOL	SEPPOS	PARAMETRIC VALUES				
○	0.004	BETA	- 0.040	MACH	1.370	
△	0.005	ALPB	- 5.340	BETB	- 0.013	
◇	0.006					

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

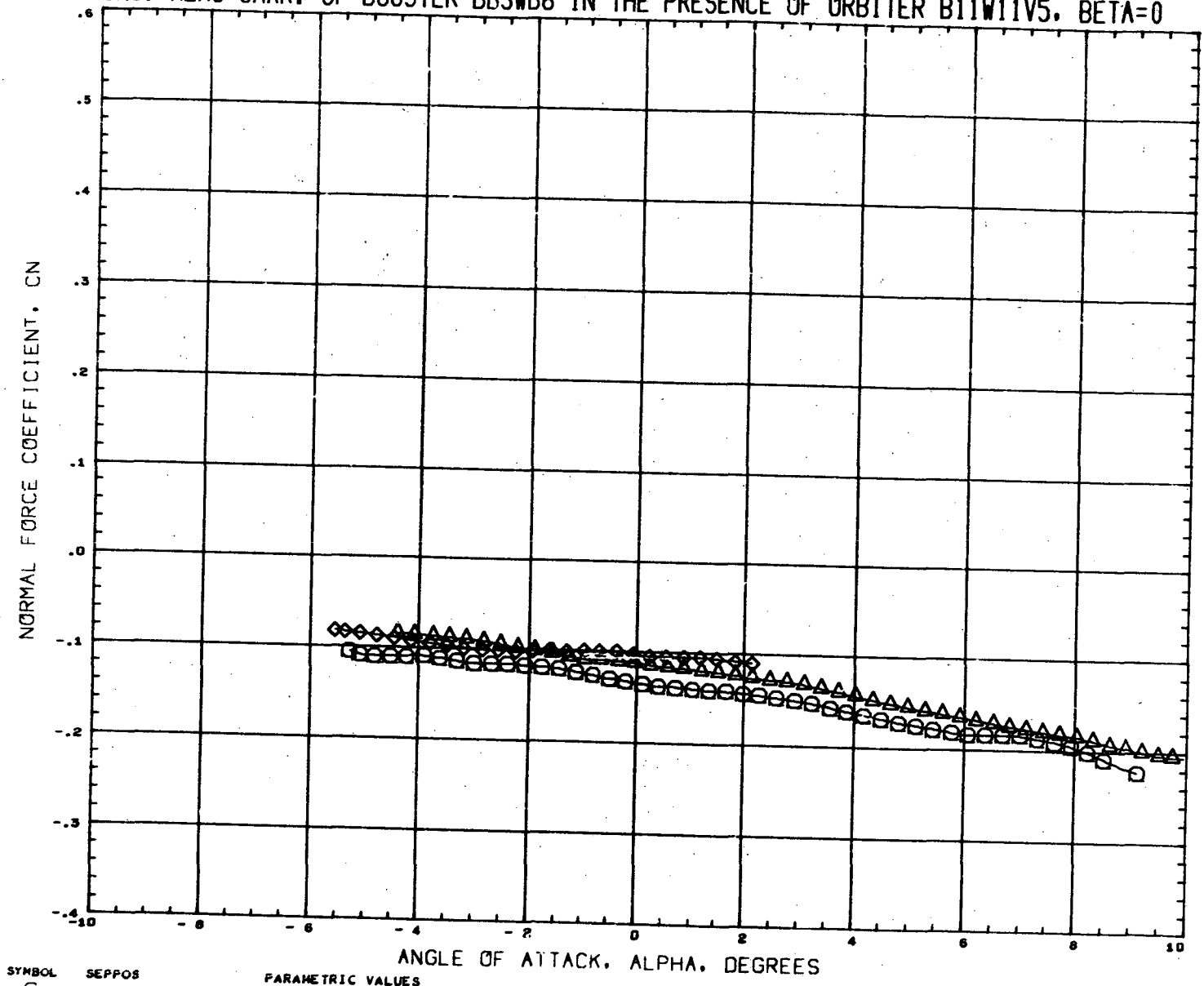
BETA	-	0.040	MACH		1.370
ALPB	-	5.340	BETB	-	0.013

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

BETA	-	0.040	MACH		1.370
ALPD	-	5.340	BETB	-	0.013

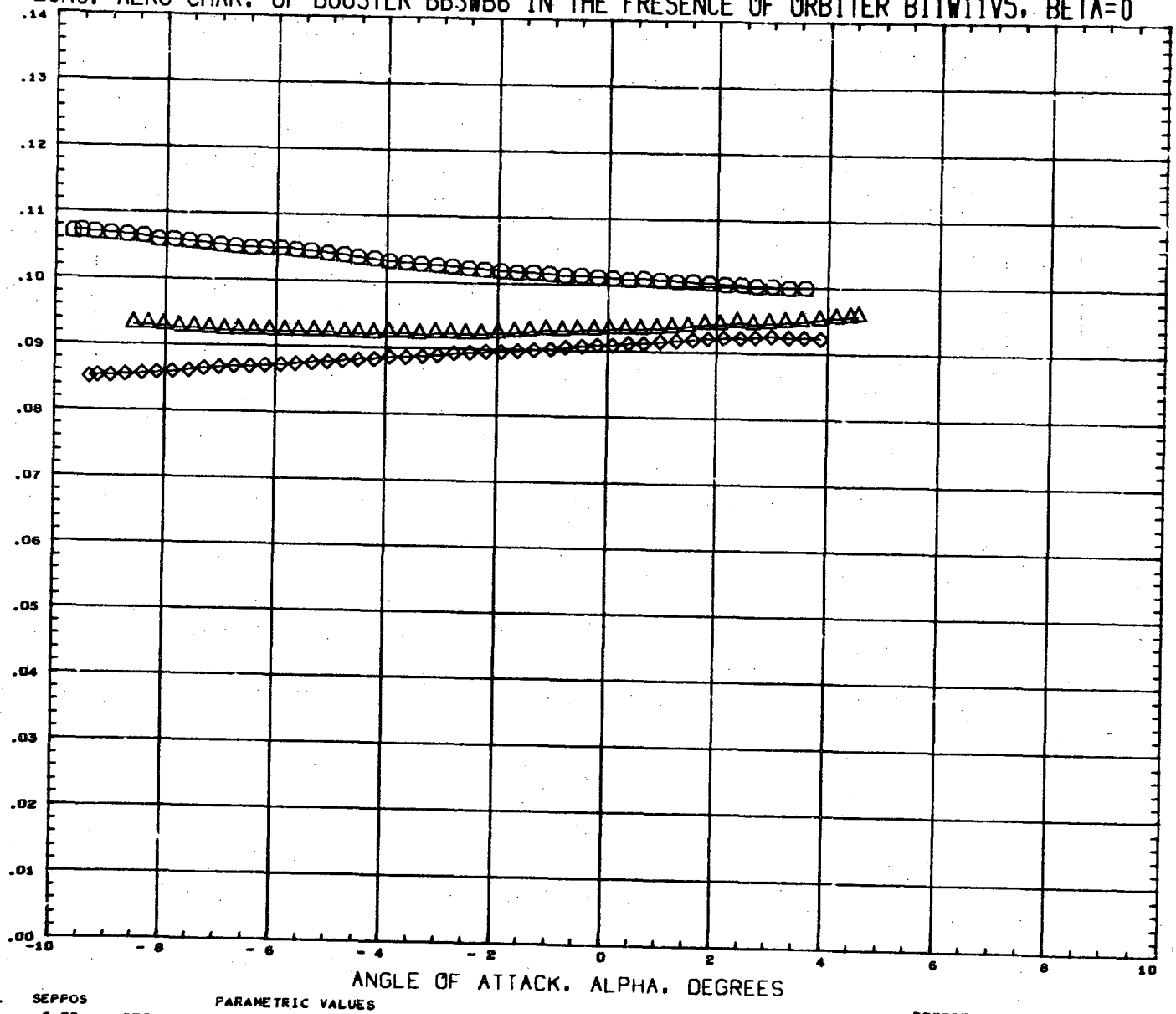
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU067) 21 JUN 71 PAGE 228

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



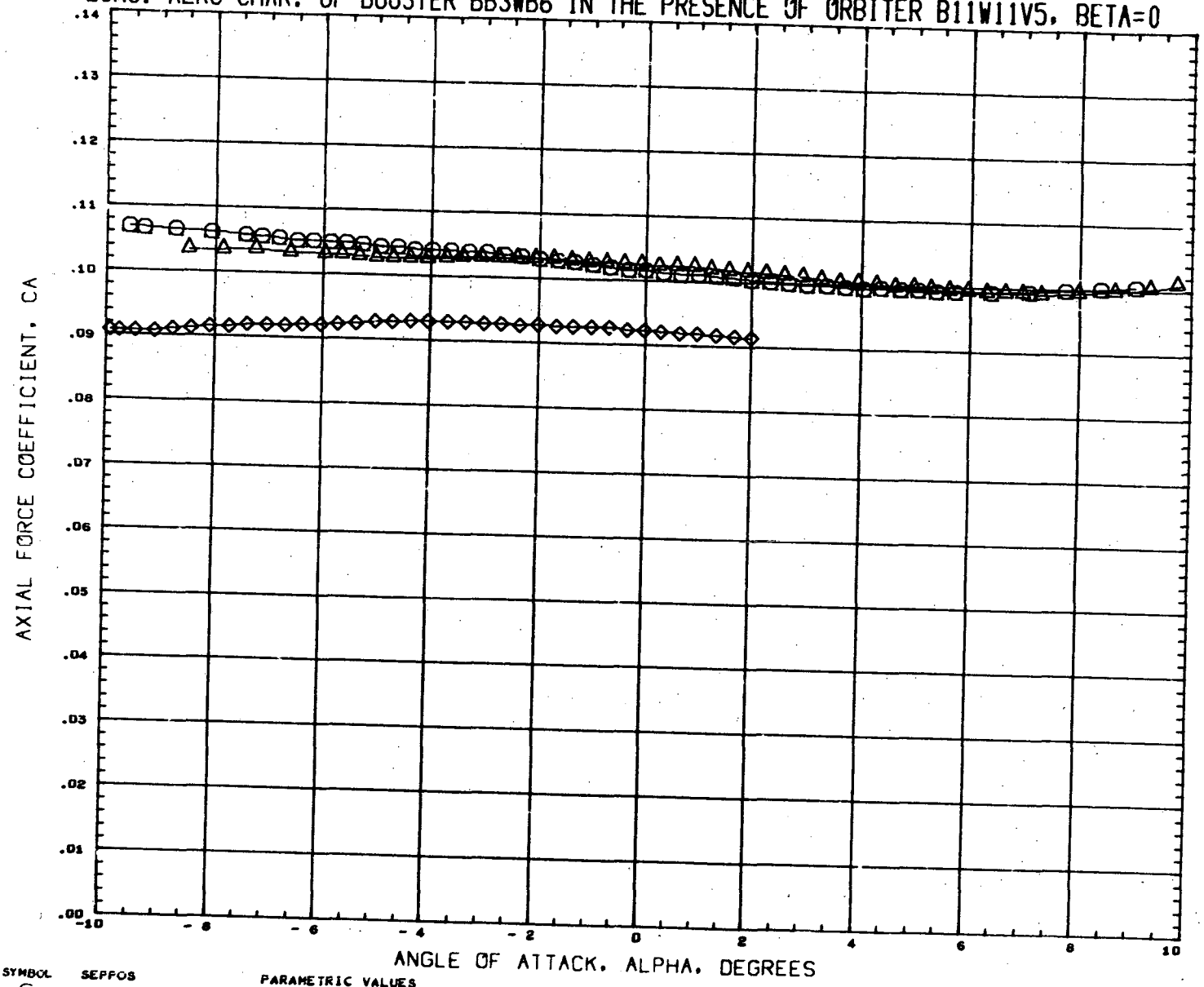
SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.004	BETA	- 0.040	MACH	1.370
△	0.005	ALFB	- 5.340	BETB	- 0.013
◇	0.006				

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

REFERENCE FILE .0006

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

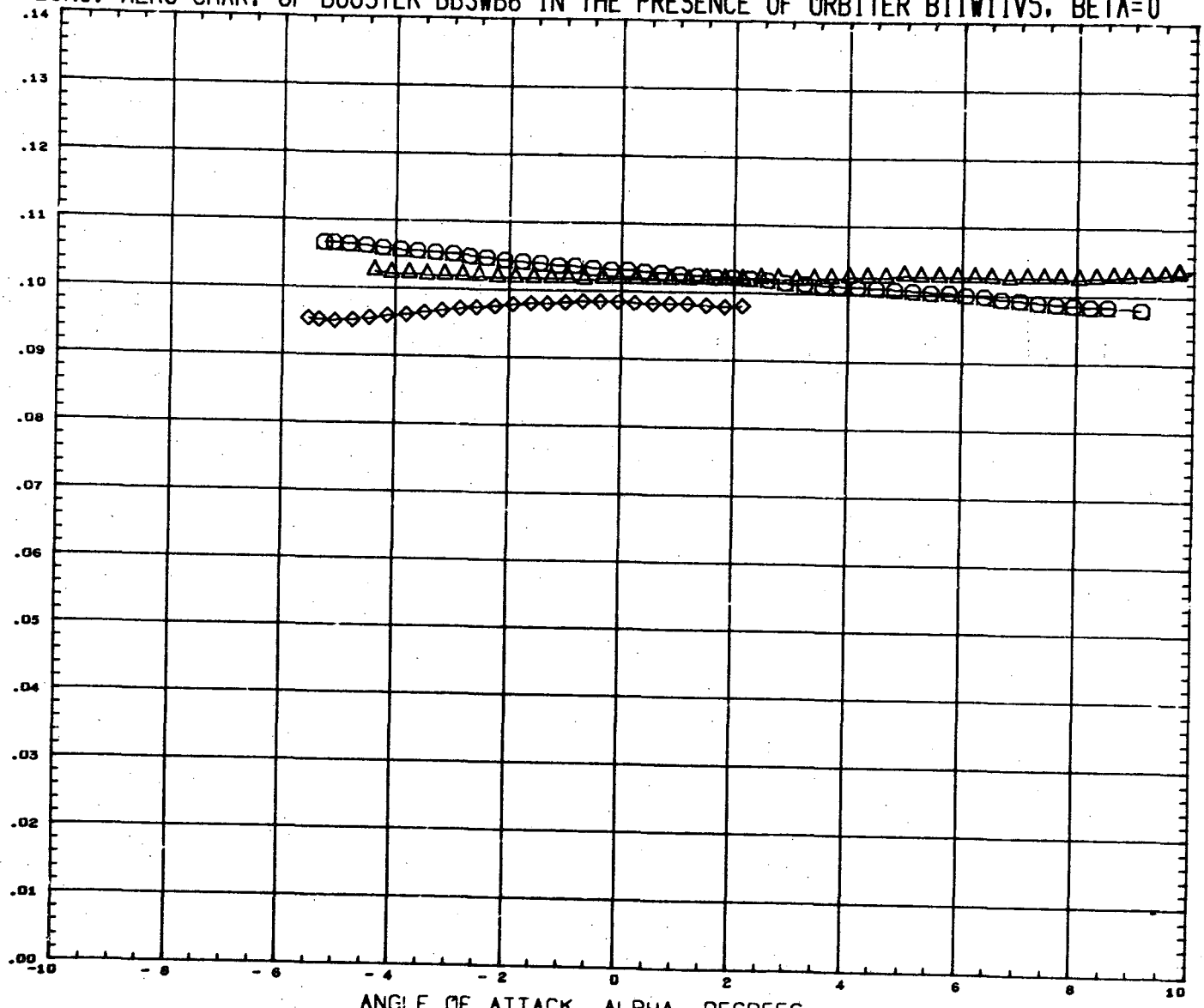
BETA	-	0.040	MACH		1.370
ALFB	-	5.340	BETB	-	0.013

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



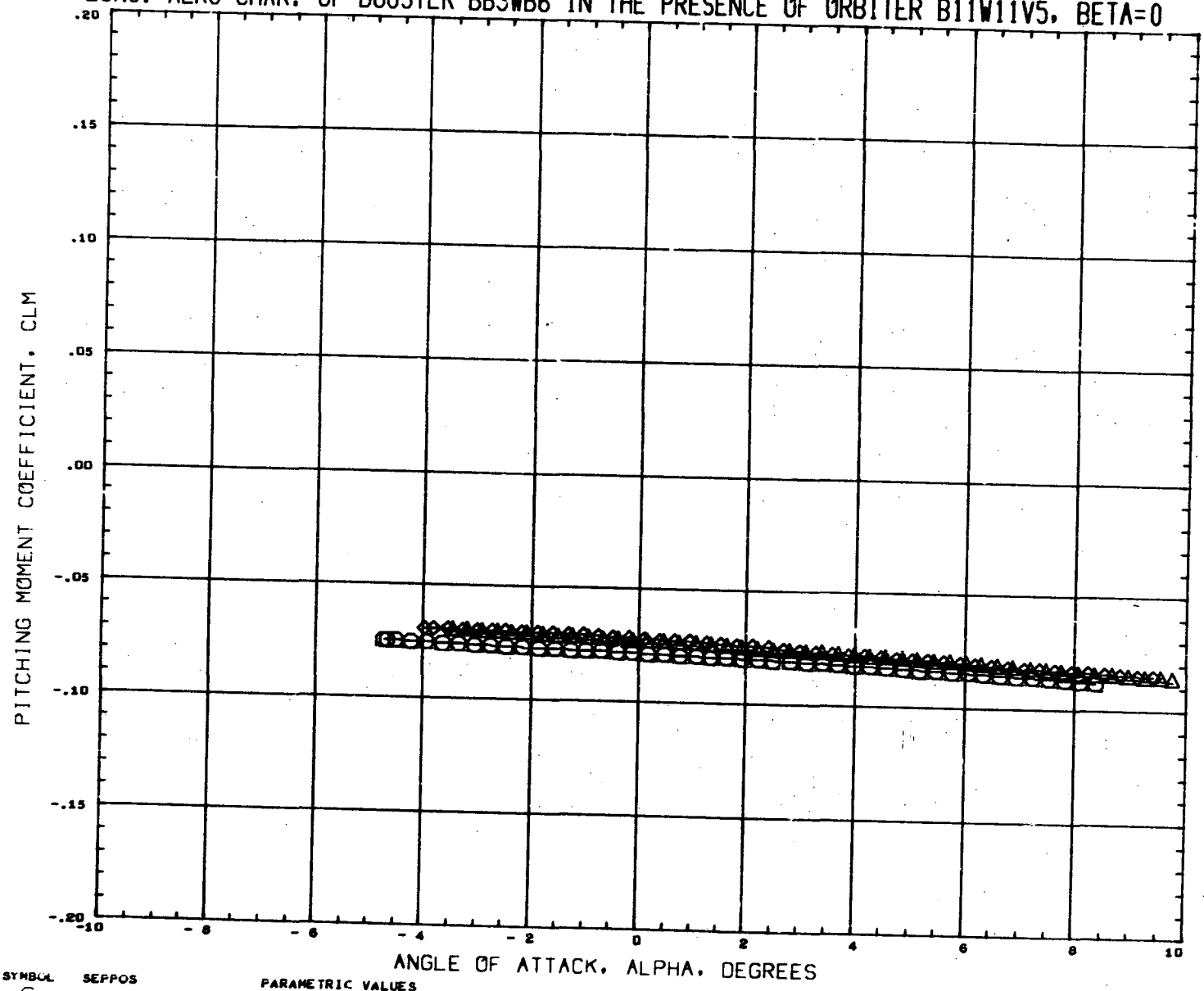
SYMBOL	SEPFOS	PARAMETRIC VALUES			
○	0.010	BETA - 0.040	MACH	1.370	
△	0.011	ALPB - 5.340	BETB	- 0.013	
◇	0.012				

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3730	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



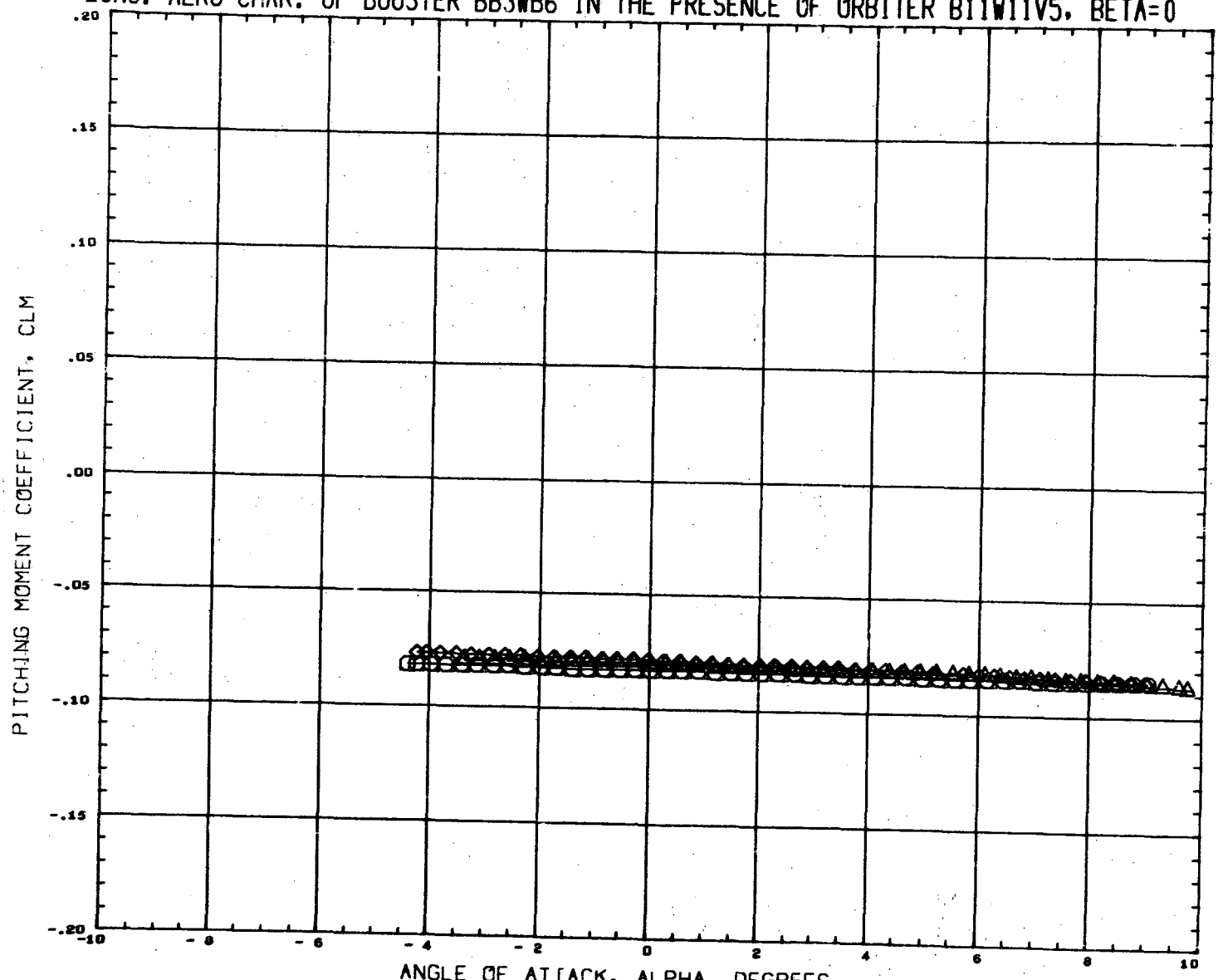
SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.004	BETA	- 0.054	MACH		1.370
△	0.005	ALPB	3.849	BETB	-	0.006
◇	0.006					

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

BETA	- 0.054	MACH	1.370
ALPB	3.849	BETB	- 0.006

REFERENCE INFORMATION

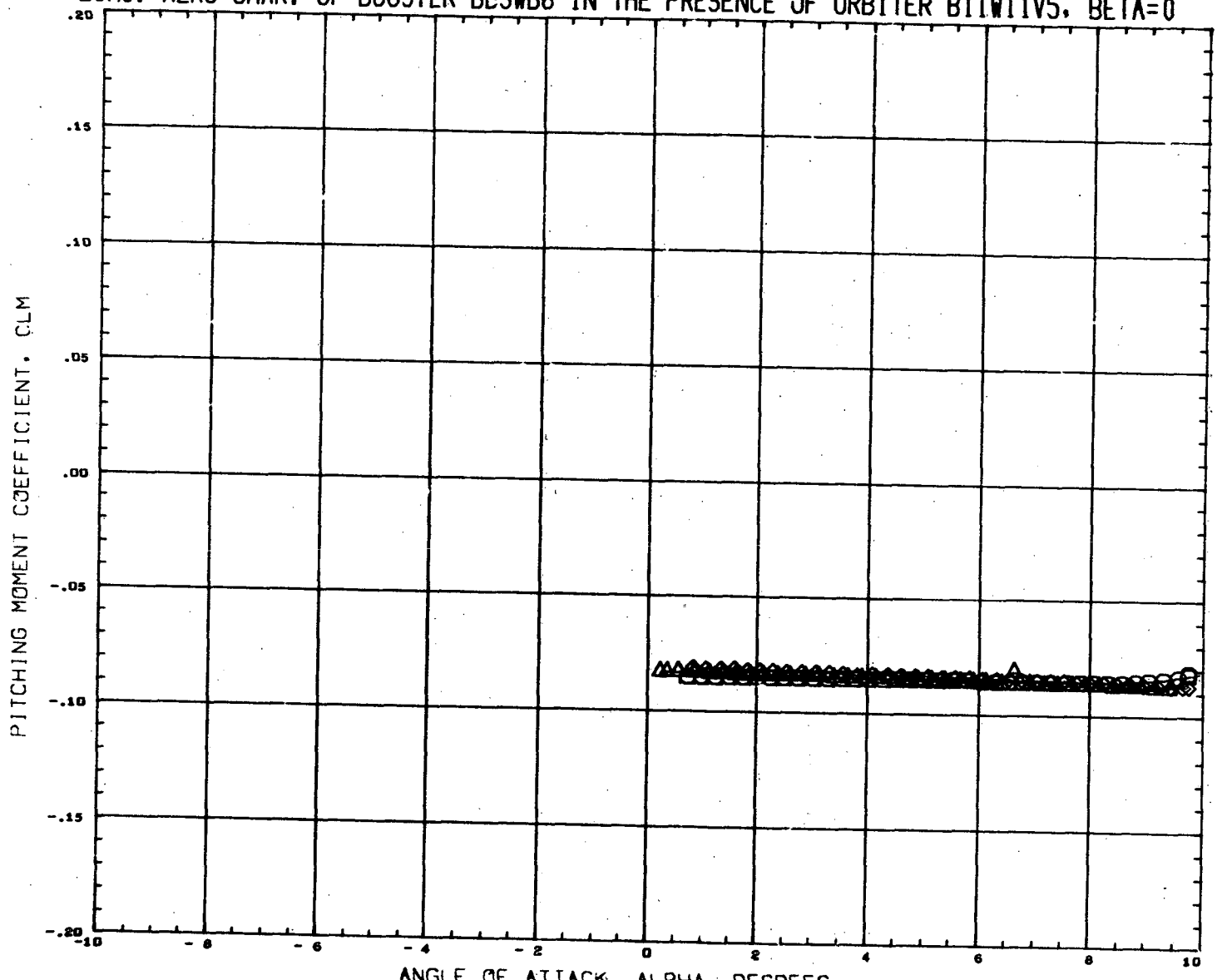
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5 (RCU071) 21 JUN 71 PAGE 233

60

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

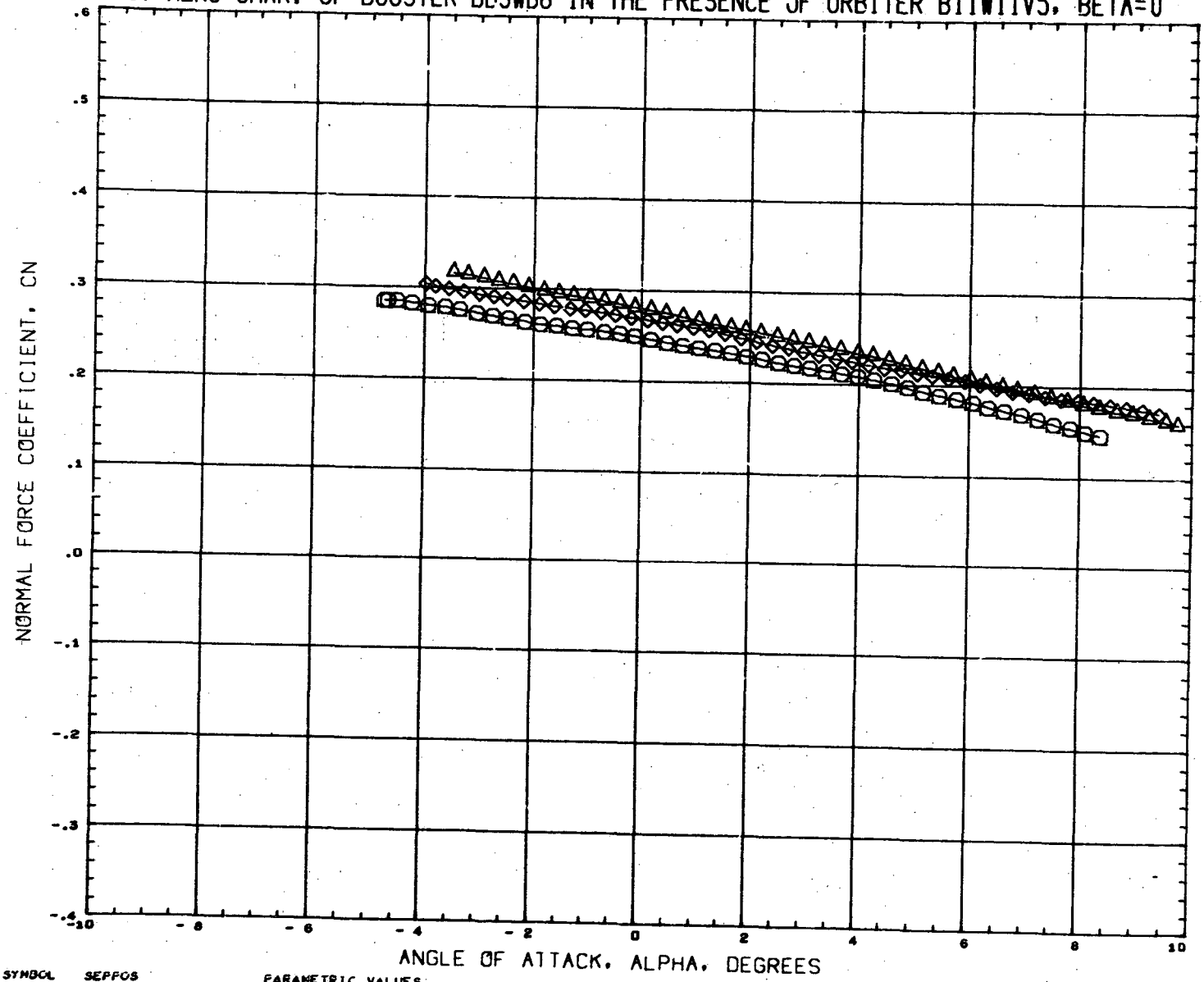
BETA	-	0.054	MACH		1.370
ALFB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
△	0.004
◇	0.005
○	0.006

PARAMETRIC VALUES

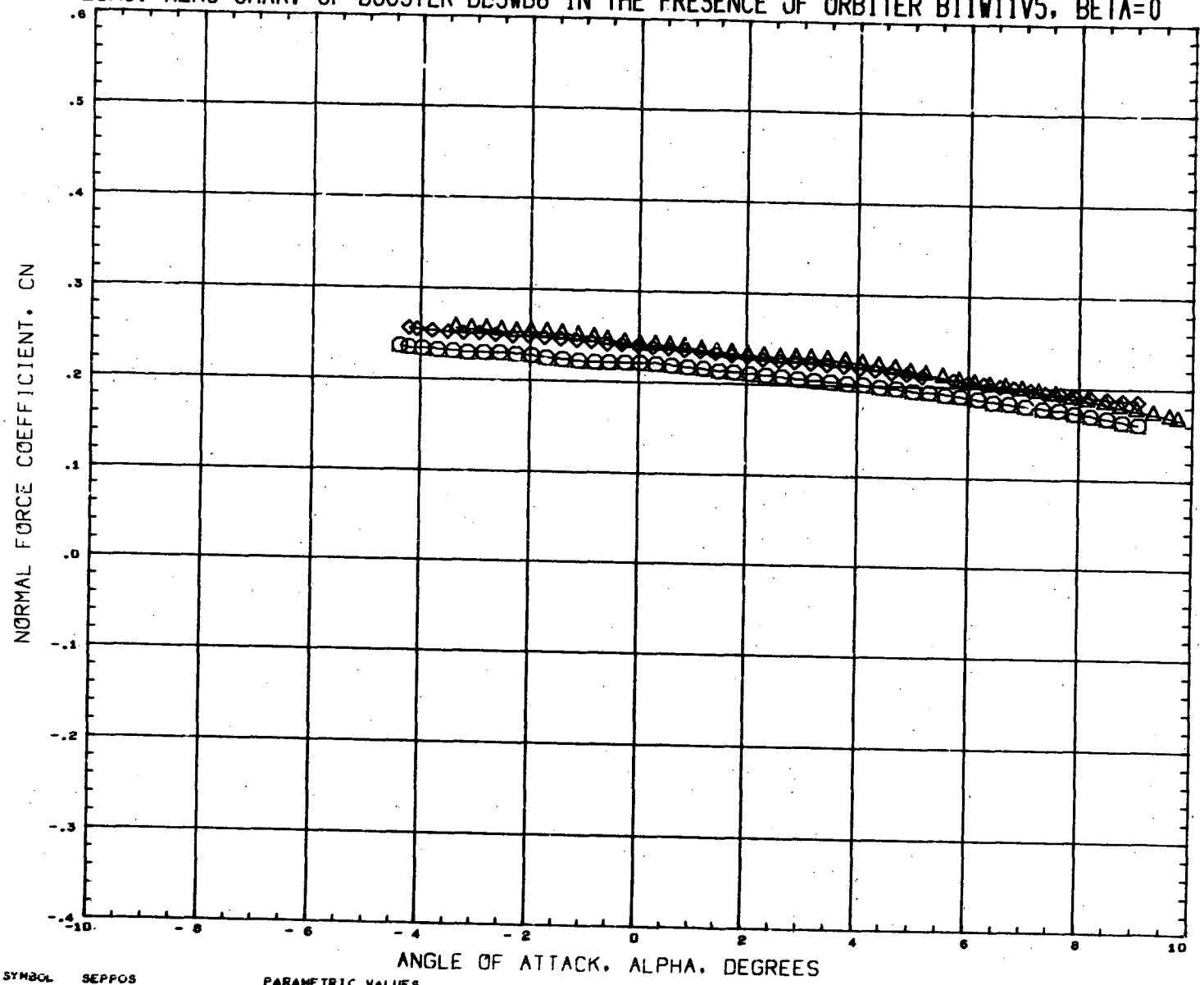
BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

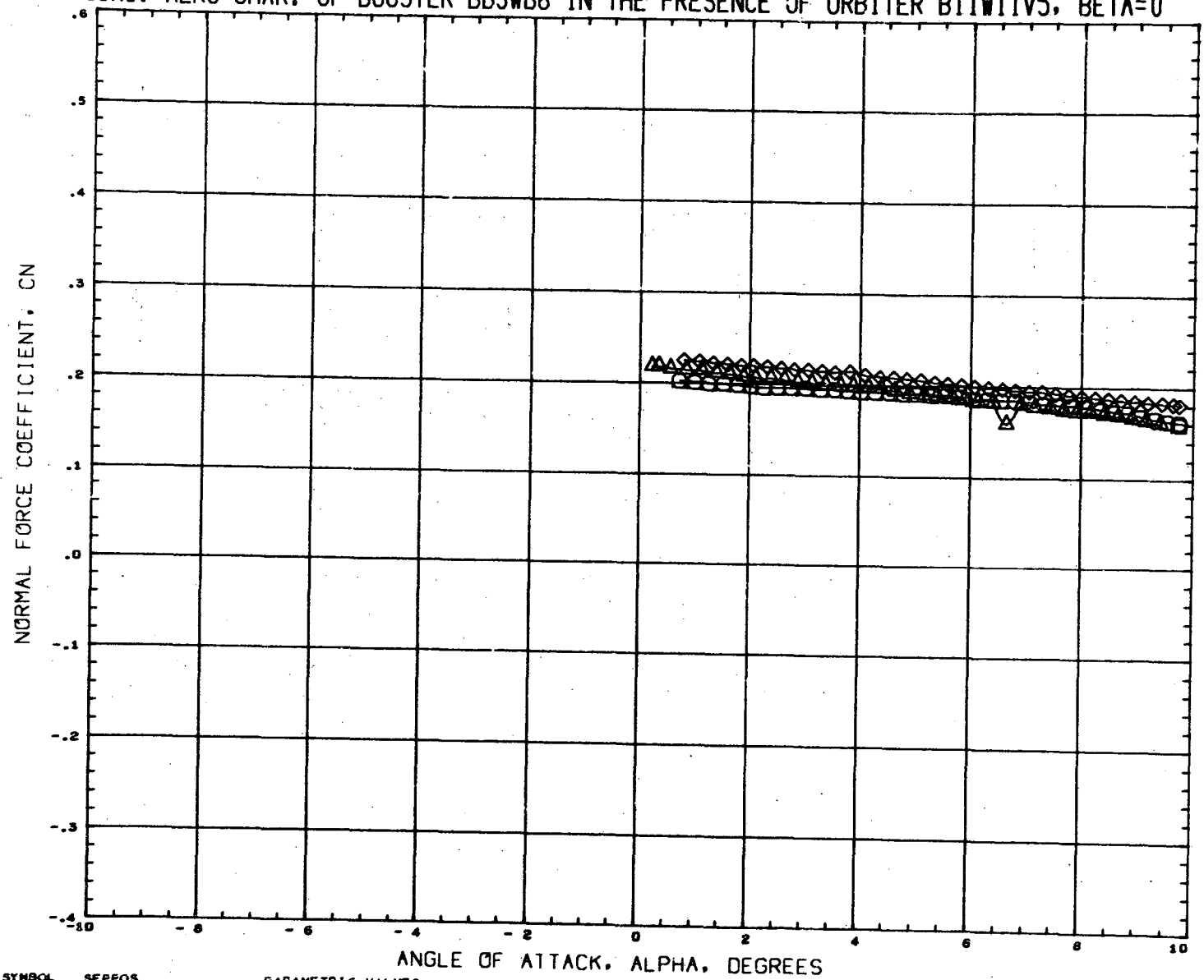
BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPFOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

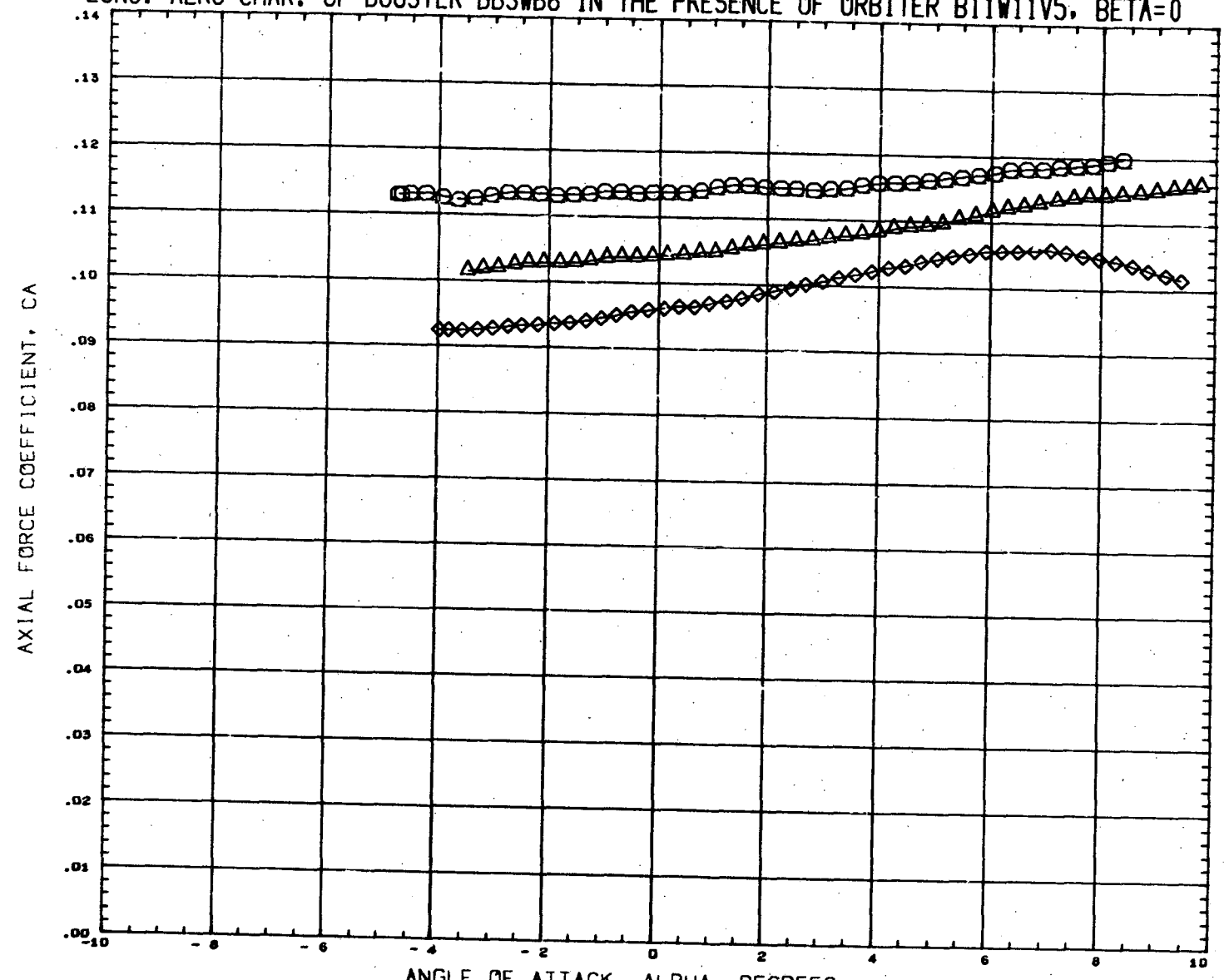
BETA	-	0.054	MACH		1.370
ALFB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.004
△	0.005
◇	0.006

PARAMETRIC VALUES

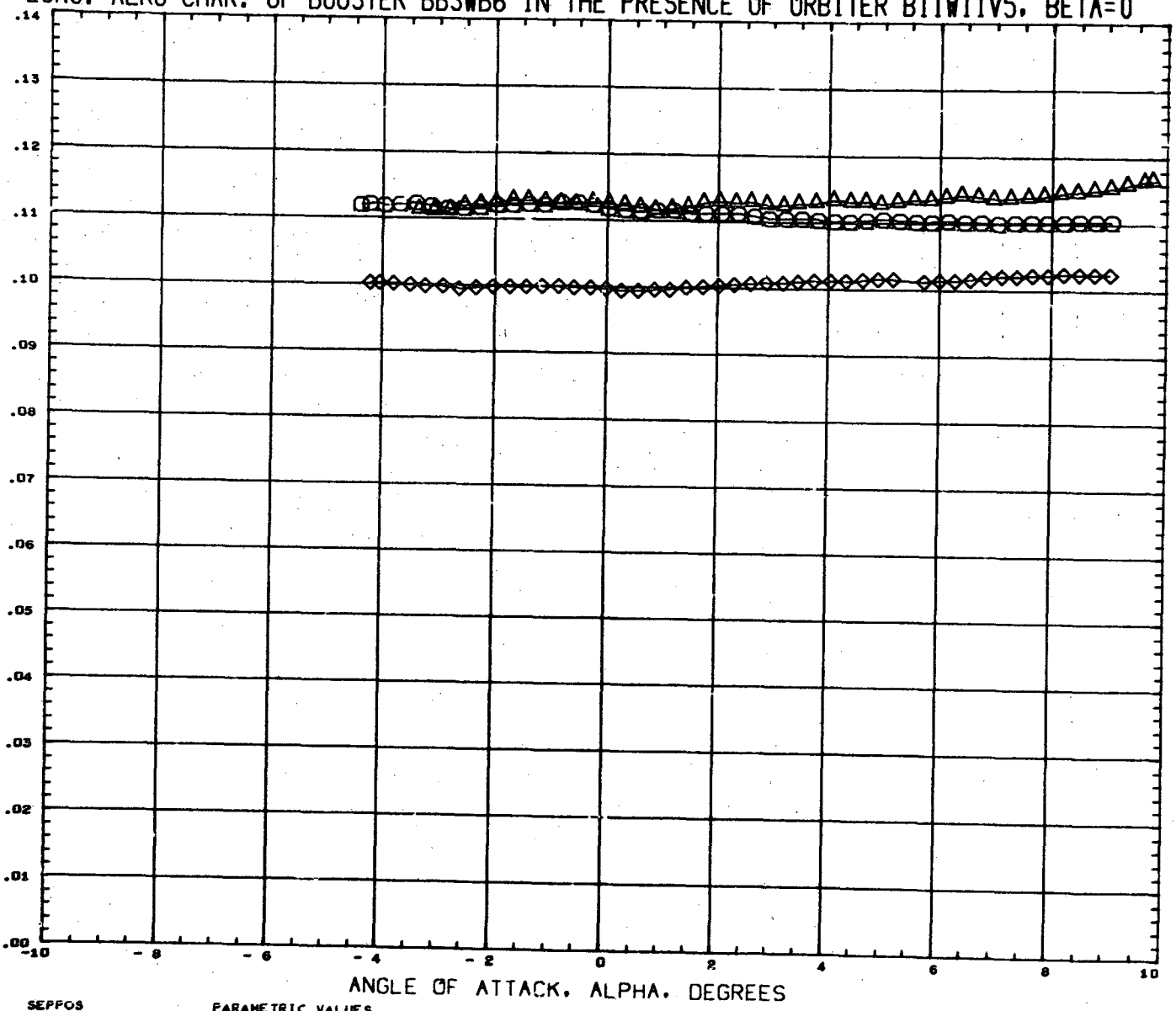
BETA	- 0.054	MACH		1.370
ALFB	3.849	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5. BETA=0



SYMBOL	SEPFOS
○	0.007
△	0.008
◇	0.009

PARAMETRIC VALUES

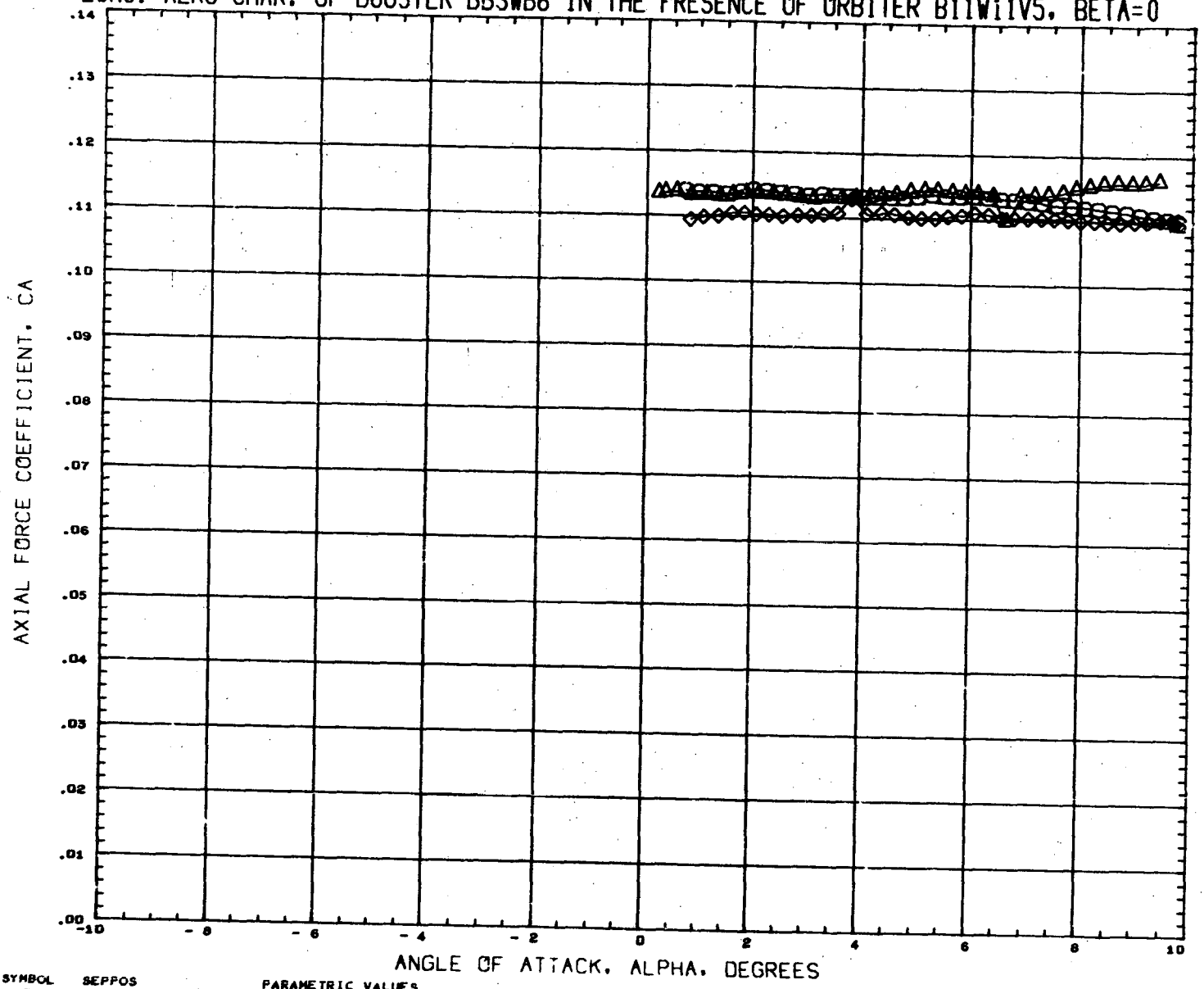
BETA	-	0.054	MACH		1.370
ALPB		3.849	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF BOOSTER BB3WB6 IN THE PRESENCE OF ORBITER B11W11V5, BETA=0



SYMBOL	SEPPOS
○	0.010
△	0.011
◇	0.012

PARAMETRIC VALUES

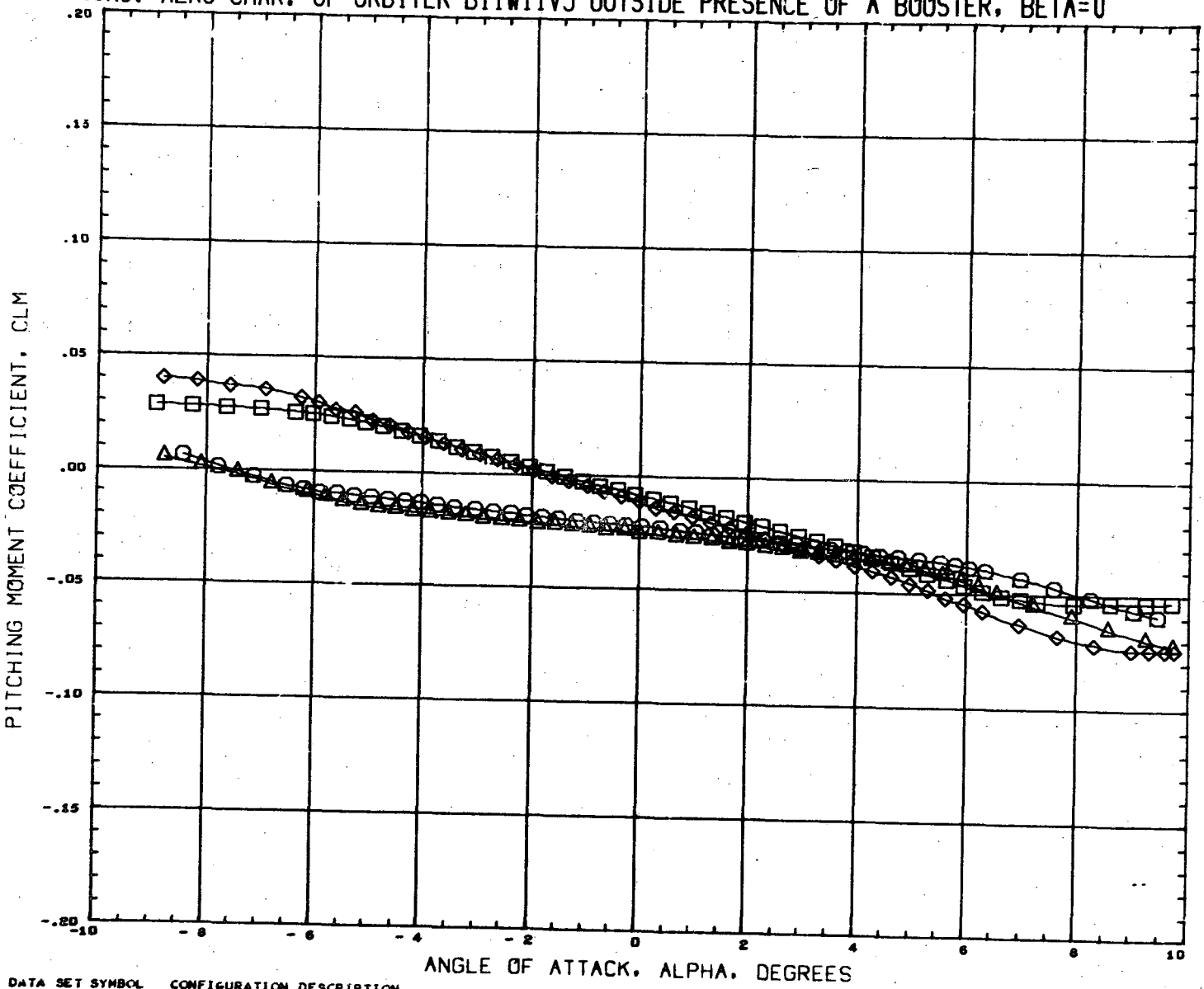
BETA	-	0.054	MACH		1.370
ALPB		3.049	BETB	-	0.006

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

REFERENCE FILE .0000

LONG. AERO CHAR. OF ORBITER B11W11V5 OUTSIDE PRESENCE OF A BOOSTER, BETA=0



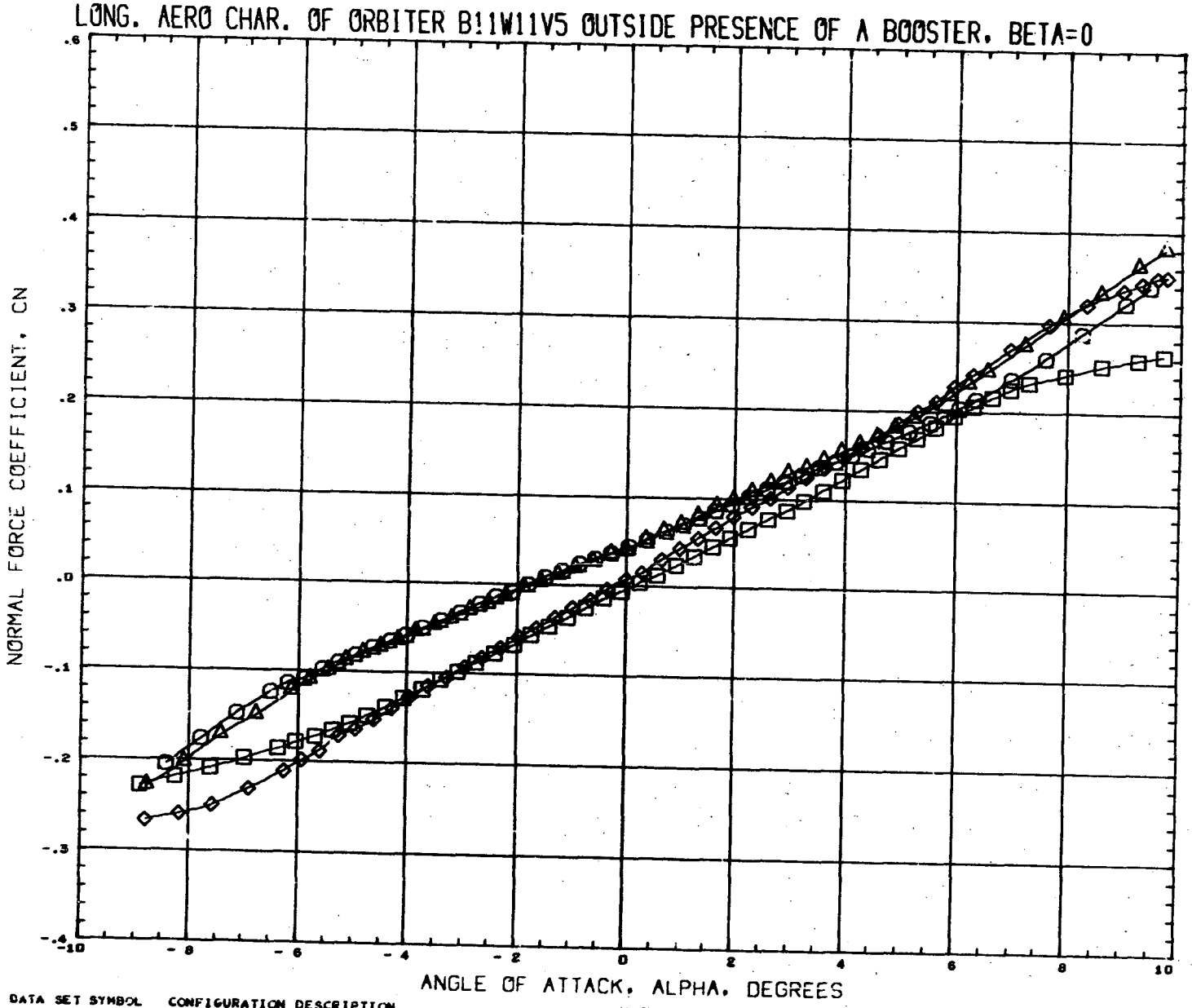
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RCU040)	○	MSC S-3D ORBITER B11W11V5 ALONE
(RCU001)	△	MSC S-3D ORBITER B11W11V5 ALONE
(RCU003)	◇	MSC S-3D ORBITER B11W11V5 ALONE
(RCU029)	□	MSC S-3D ORBITER B11W11V5 ALONE

MACH	BETA
0.600	-0.024
0.900	-0.012
1.090	-0.024
1.370	-0.042

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8823	IN
BREF	5.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

SEPPOS 0.016



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RCU040)	MSC S-3D ORBITER B11W11V5 ALONE
(RCU001)	MSC S-3D ORBITER B11W11V5 ALONE
(RCU003)	MSC S-3D ORBITER B11W11V5 ALONE
(RCU029)	MSC S-3D ORBITER B11W11V5 ALONE

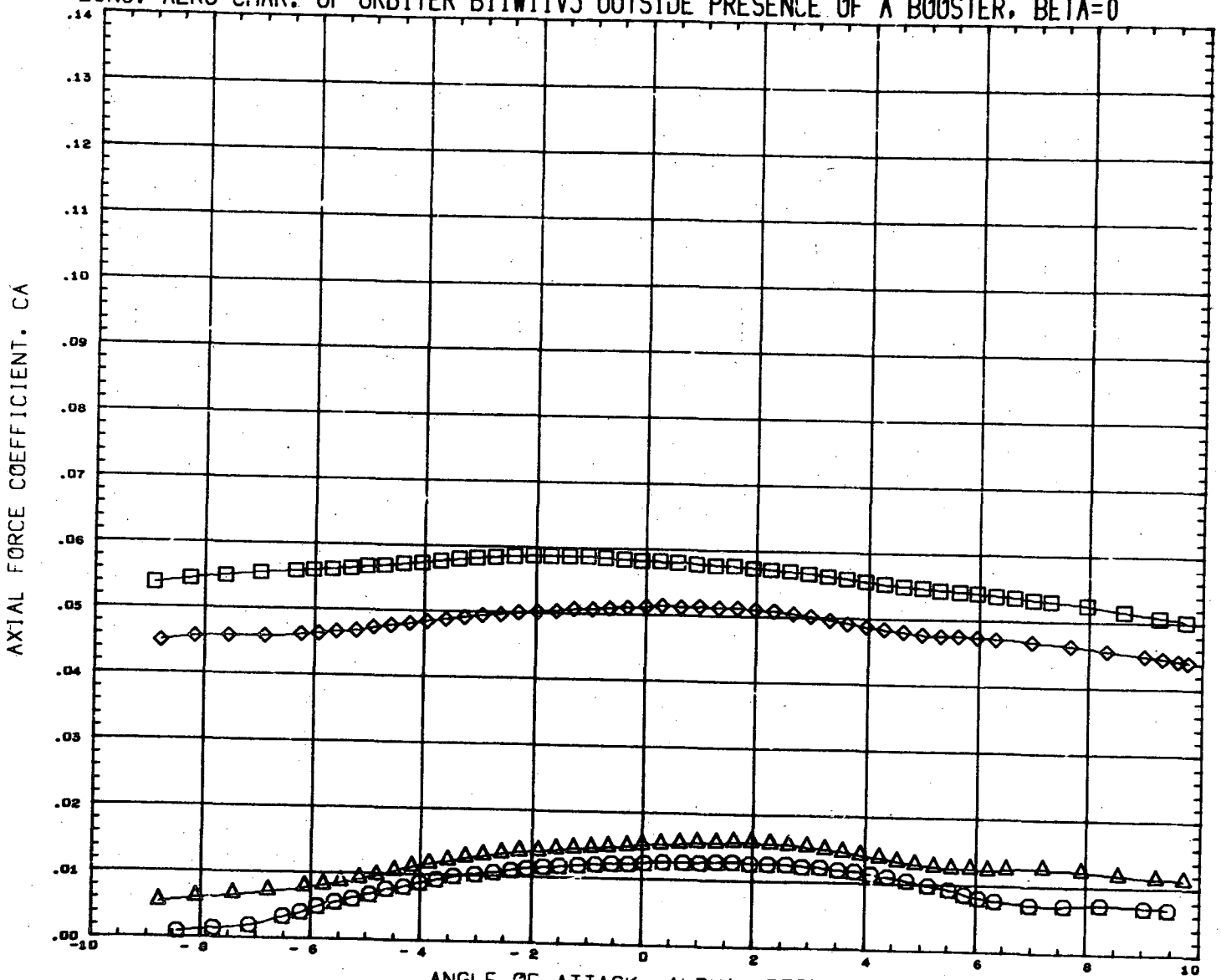
MACH	BETA
0.600	-0.024
0.900	-0.012
1.090	-0.024
1.370	-0.042

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8800	IN
BREF	8.0750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

SEPPOS 0.016

LONG. AERO CHAR. OF ORBITER B11W11V5 OUTSIDE PRESENCE OF A BOOSTER, BETA=0



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RCU040)	○	MSC S-3D ORBITER B11W11V5 ALONE
(RCU001)	△	MSC S-3D ORBITER B11W11V5 ALONE
(RCU003)	◇	MSC S-3D ORBITER B11W11V5 ALONE
(RCU029)	□	MSC S-3D ORBITER B11W11V5 ALONE

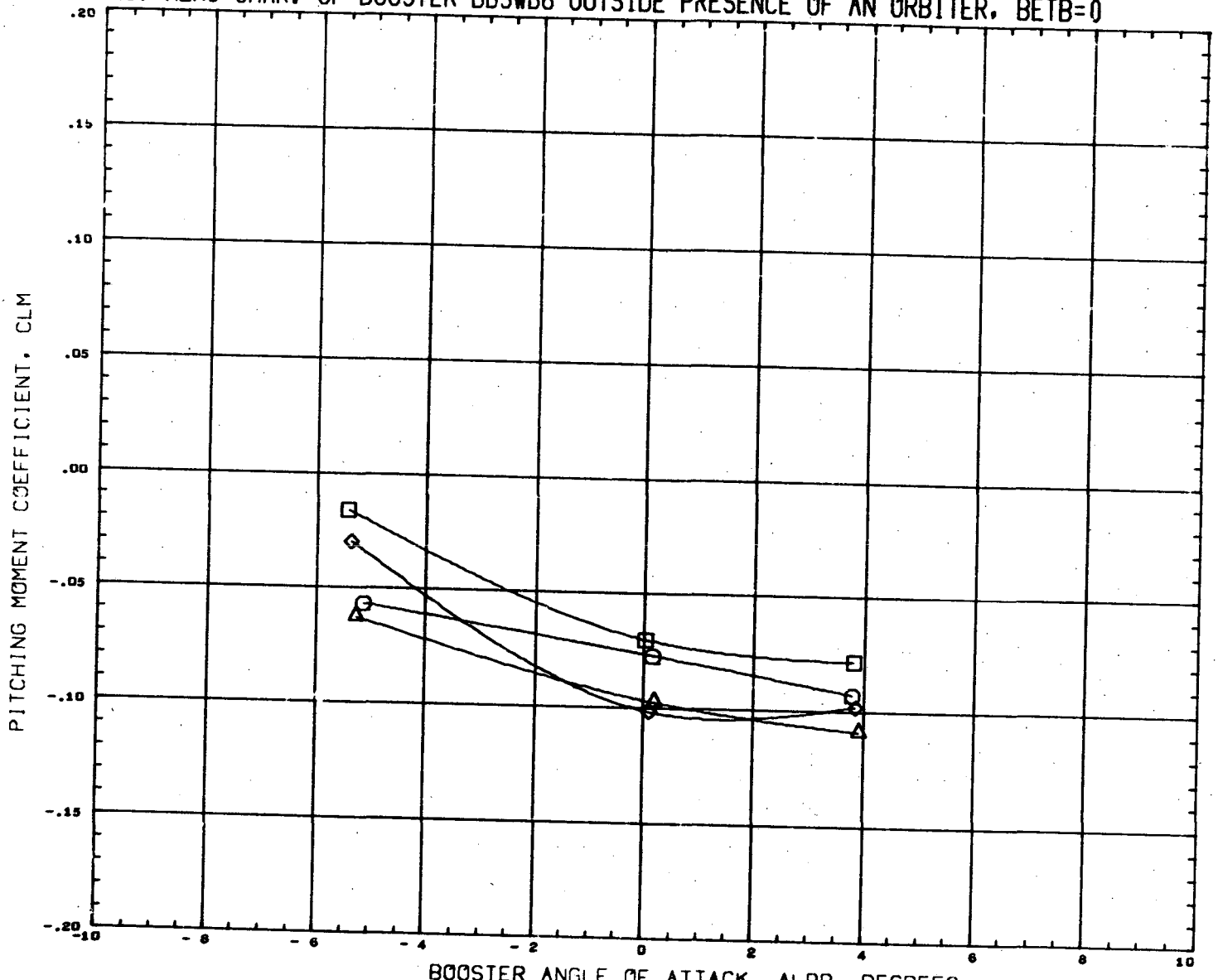
SEPPOS 0.016

MACH	BETA
0.600	-0.024
0.900	-0.012
1.090	-0.024
1.370	-0.042

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.6820	IN
BREF	5.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LONG. AERO CHAR. OF BOOSTER BB3WB6 OUTSIDE PRESENCE OF AN ORBITER, BETB=0



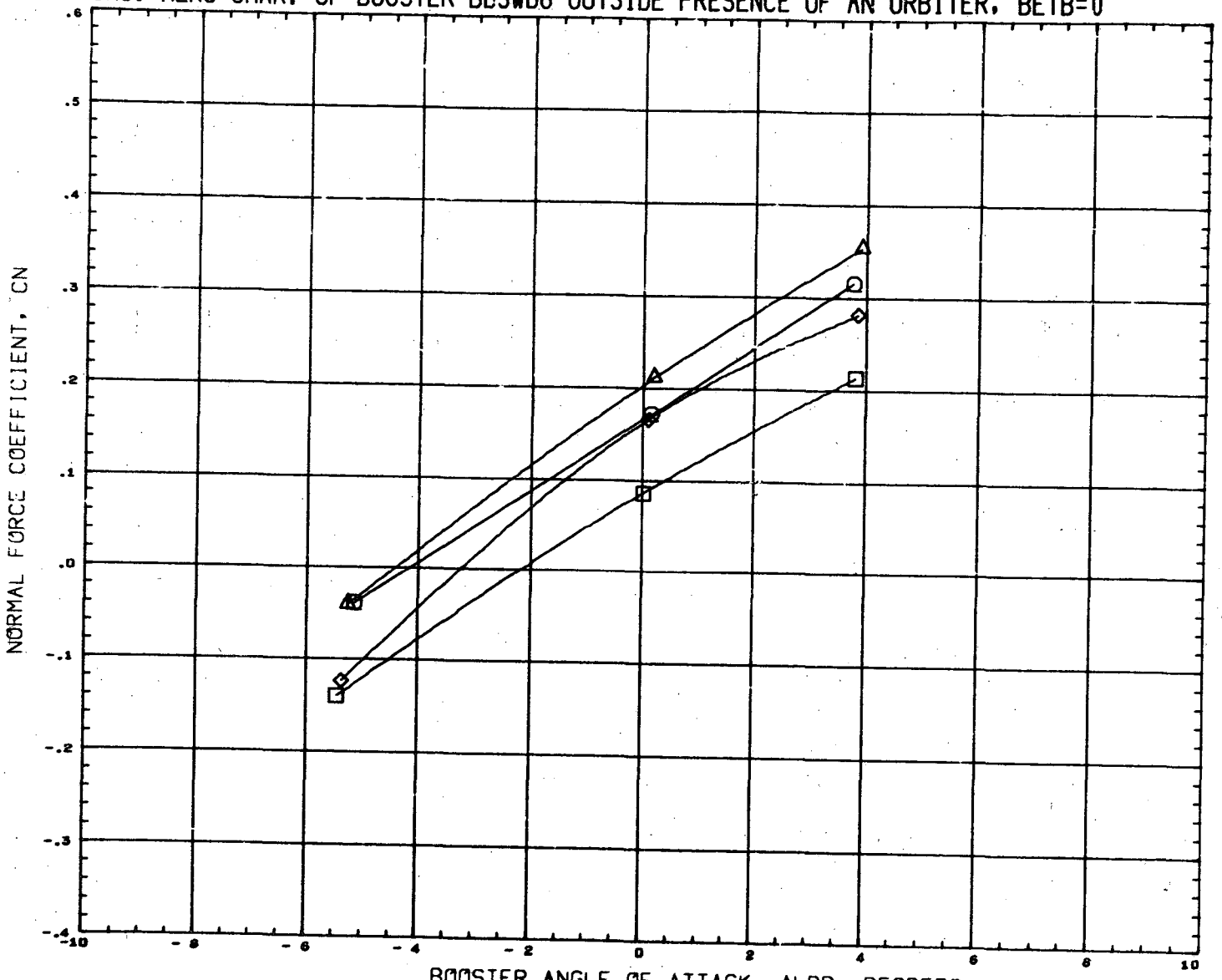
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	
(ACU201)	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 92,80,97
(ACU202)	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 93,81,96
(ACU203)	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 94,82,95
(ACU204)	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 99,101,98

MACH	SEPPOS	ALPHA	BETB
0.600	0.016	0.000	0.000
0.900	0.016	0.000	0.000
1.100	0.016	0.000	0.000
1.380	0.016	0.000	0.000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0086	

MACH 0.600 0.900 1.100 1.380

LONG. AERO CHAR. OF BOOSTER BB3WB6 OUTSIDE PRESENCE OF AN ORBITER, BETB=0



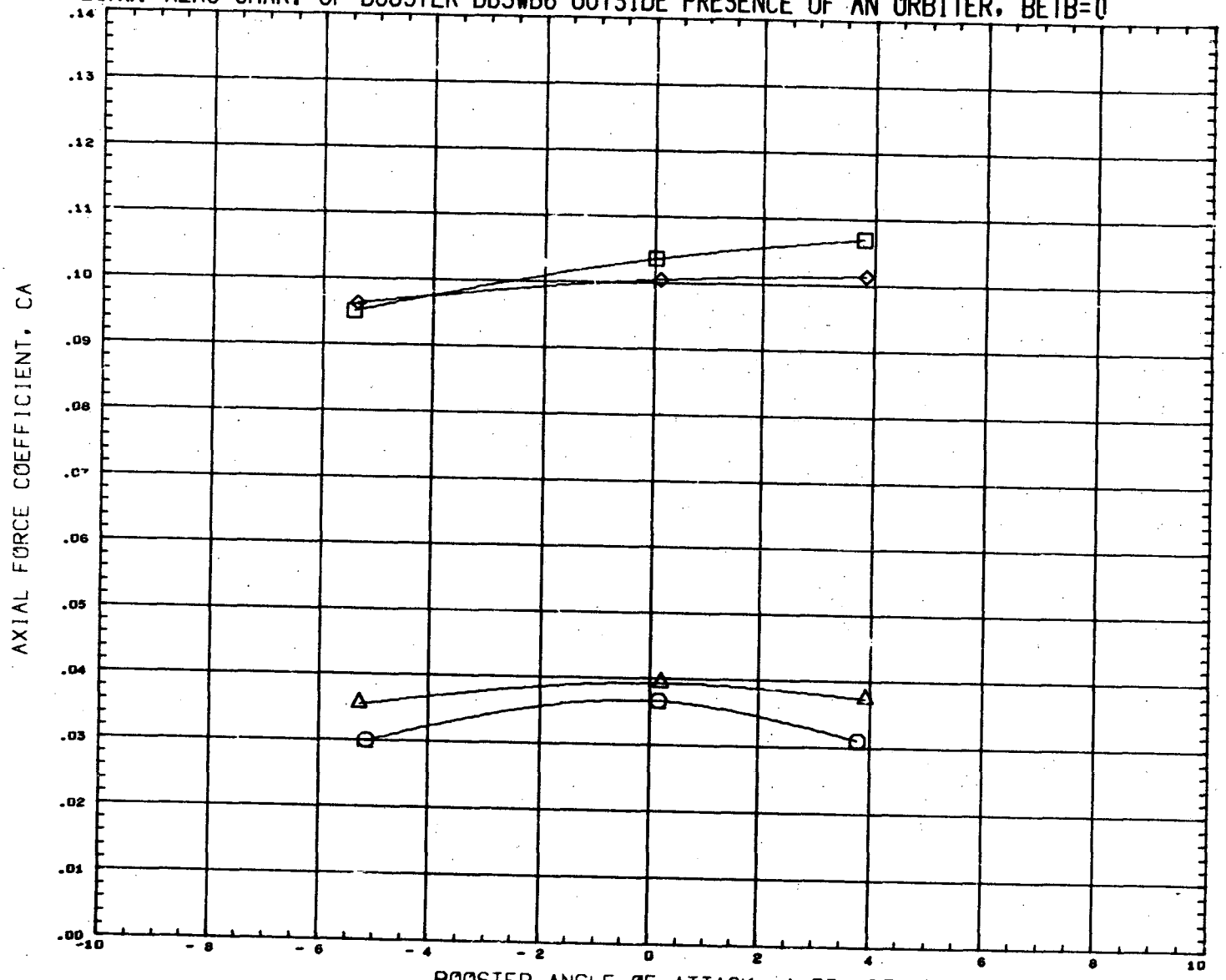
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	
(ACU201)	○	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 92,80,97
(ACU202)	△	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 93,81,96
(ACU203)	◇	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 94,82,95
(ACU204)	□	MSC S-30 BOOSTER BB3WB6 ALONE	D/S 99,101,98

MACH	SEPPOS	ALPHA	BETB
0.600	0.016	0.000	0.000
0.900	0.016	0.000	0.000
1.100	0.016	0.000	0.000
1.380	0.016	0.000	0.000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MACH 0.600 0.900 1.100 1.380

LONG. AERO CHAR. OF BOOSTER BB3WB6 OUTSIDE PRESENCE OF AN ORBITER. BETB=0

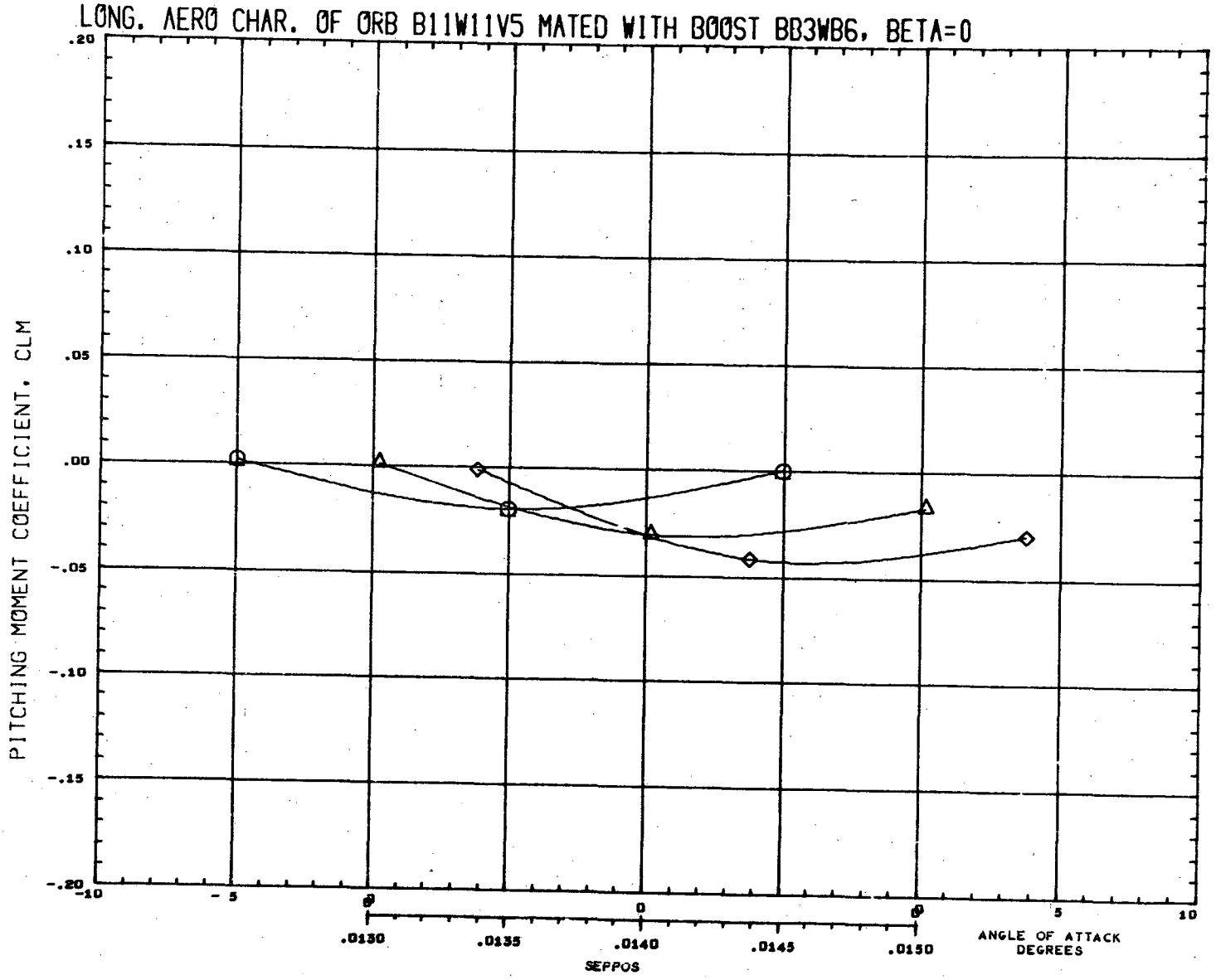


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	
(ACU201)	○	MSC S-30 BOOSTER 8B3WB6 ALONE	D/S 92,80,97
(ACU202)	△	MSC S-30 BOOSTER 8B3WB6 ALONE	D/S 93,81,96
(ACU203)	◇	MSC S-30 BOOSTER 8B3WB6 ALONE	D/S 94,82,95
(ACU204)	□	MSC S-30 BOOSTER 8B3WB6 ALONE	D/S 99,101,98

MACH	SEPPOS	ALPHA	BETB
0.600	0.016	0.000	0.000
0.900	0.016	0.000	0.000
1.100	0.016	0.000	0.000
1.380	0.016	0.000	0.000

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3743	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MACH 0.600 0.900 1.100 1.380



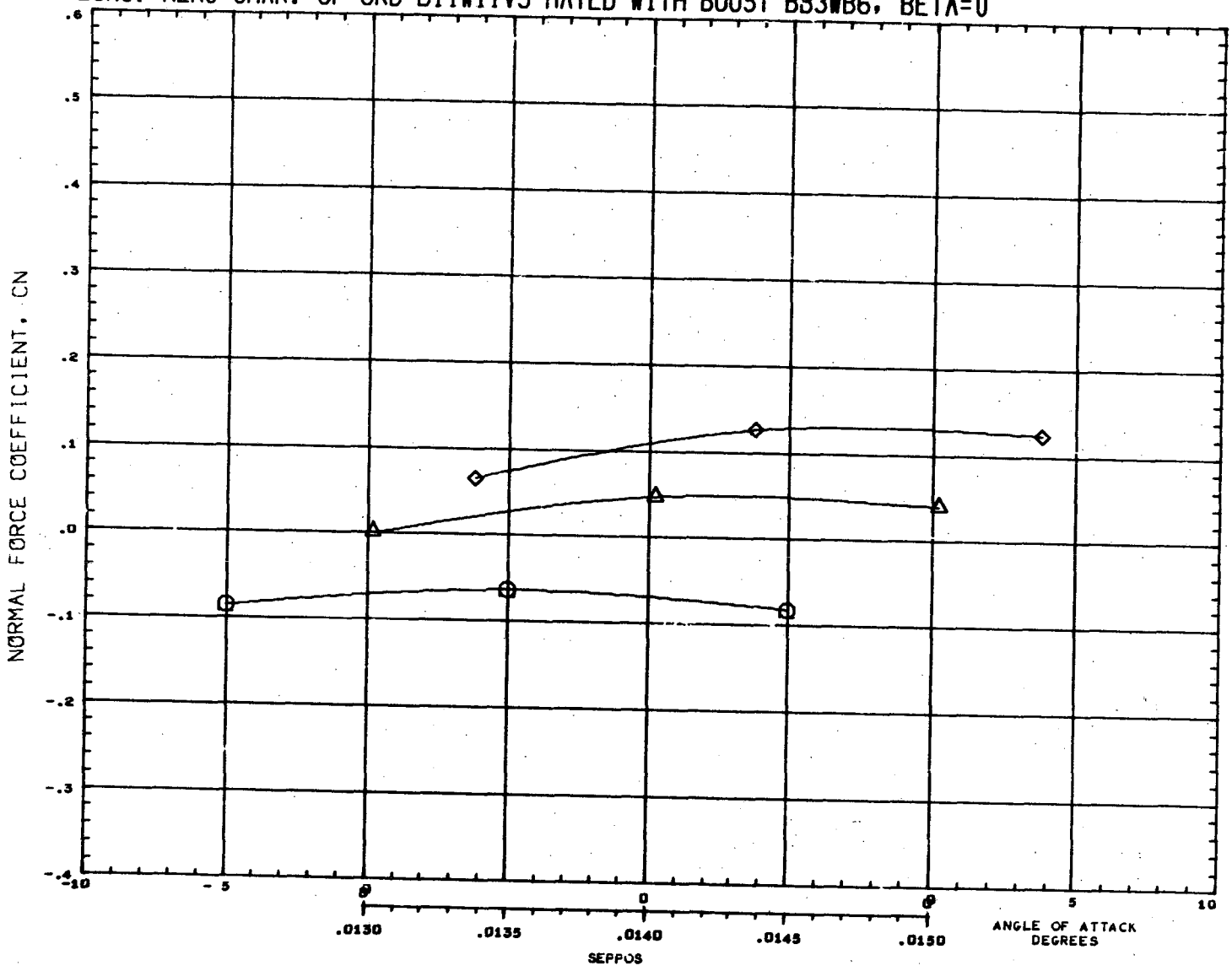
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU036)	○	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU038)	△	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU037)	◇	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.163	-0.023	0.590
3.786	3.765	-0.020	0.600

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST B83WB6, BETA=0

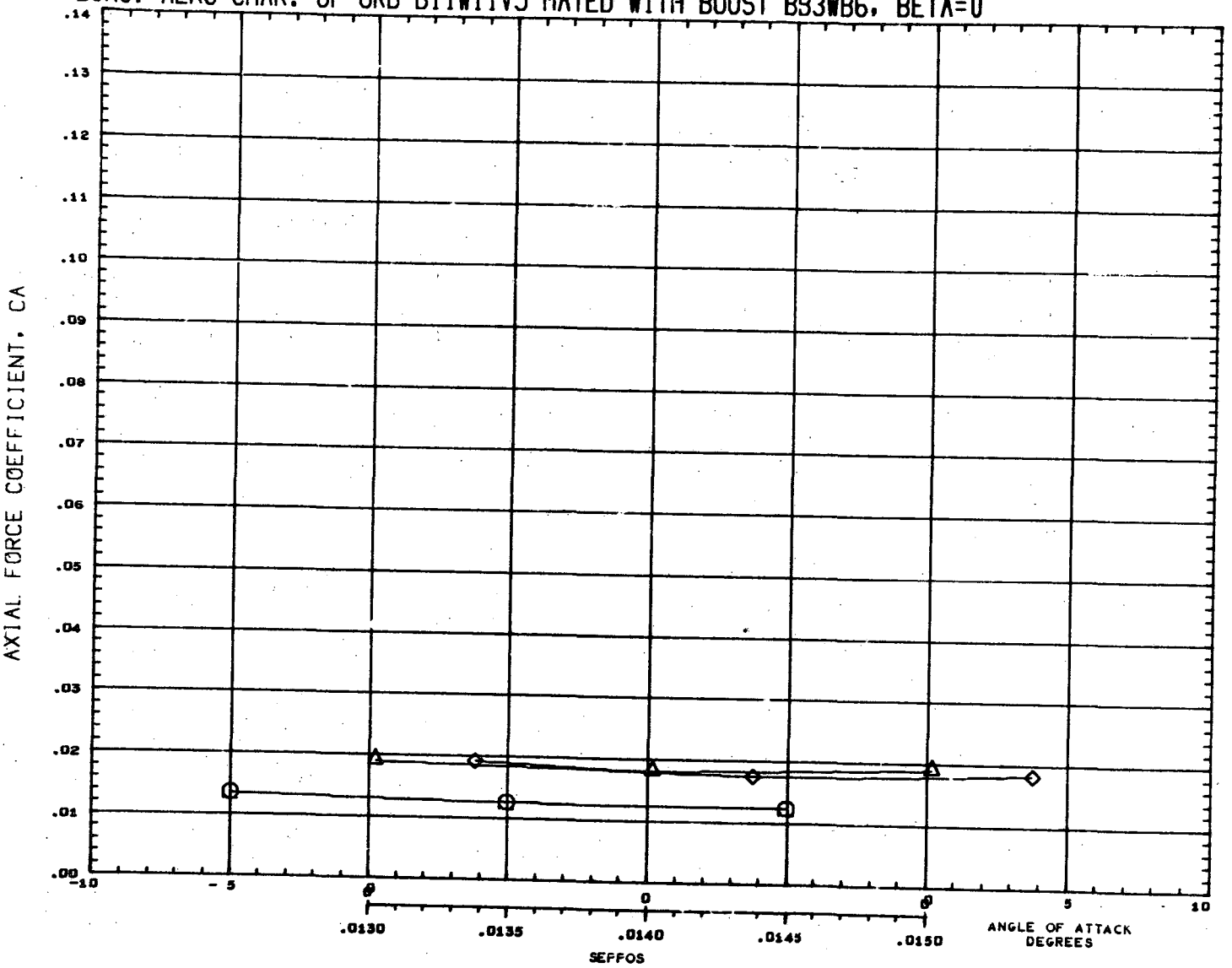


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU036)	○	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU038)	△	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU037)	◇	MSC S-3D ORBITER B11W11V5 NEAR B83WB6

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.163	-0.023	0.590
3.786	3.765	-0.020	0.600

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	9.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST B93WB6, BETA=0

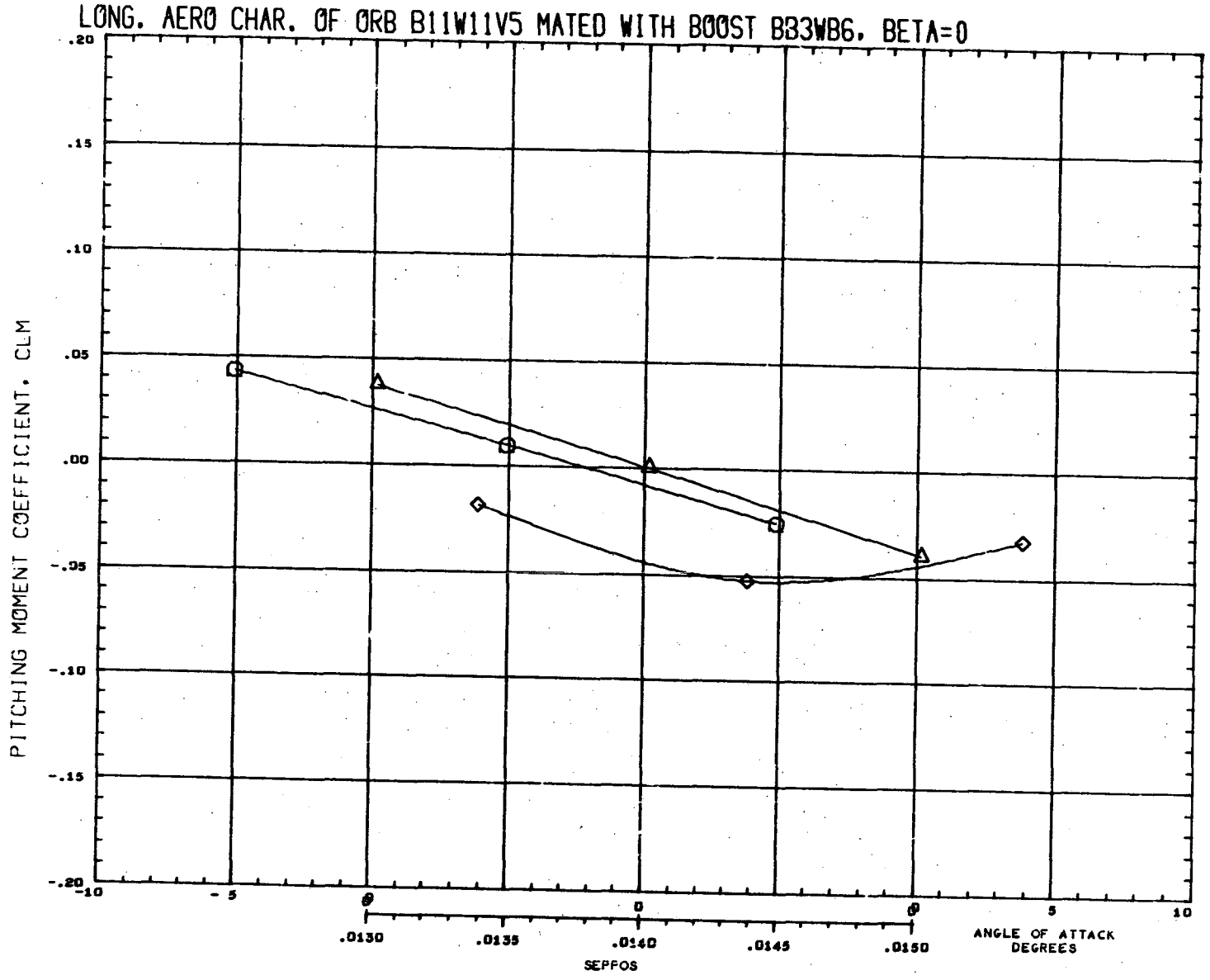


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD36)	○	MSC S-30 ORBITER B11W11V5 NEAR B83WB6
(BCUD38)	△	MSC S-30 ORBITER B11W11V5 NEAR B83WB6
(BCUD37)	◇	MSC S-30 ORBITER B11W11V5 NEAR B83WB6

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.163	-0.023	0.590
3.786	3.765	-0.020	0.600

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

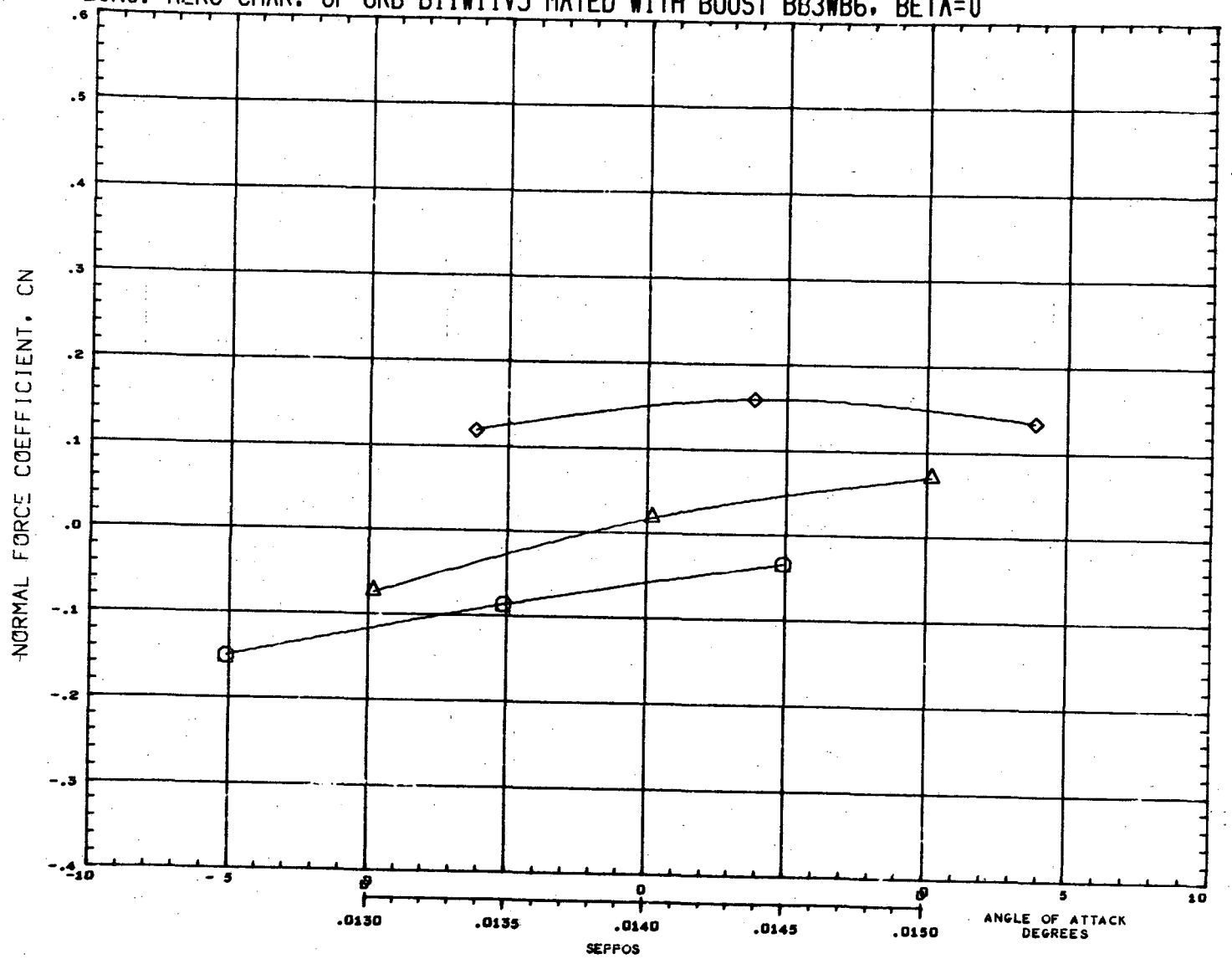


DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCU020)	○	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU019)	△	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU023)	◇	MSC S-3D ORBITER B11W11V5 NEAR B83WB6

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
3.847	3.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8823	IN
BREF	3.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST BB3WB6, BETA=0

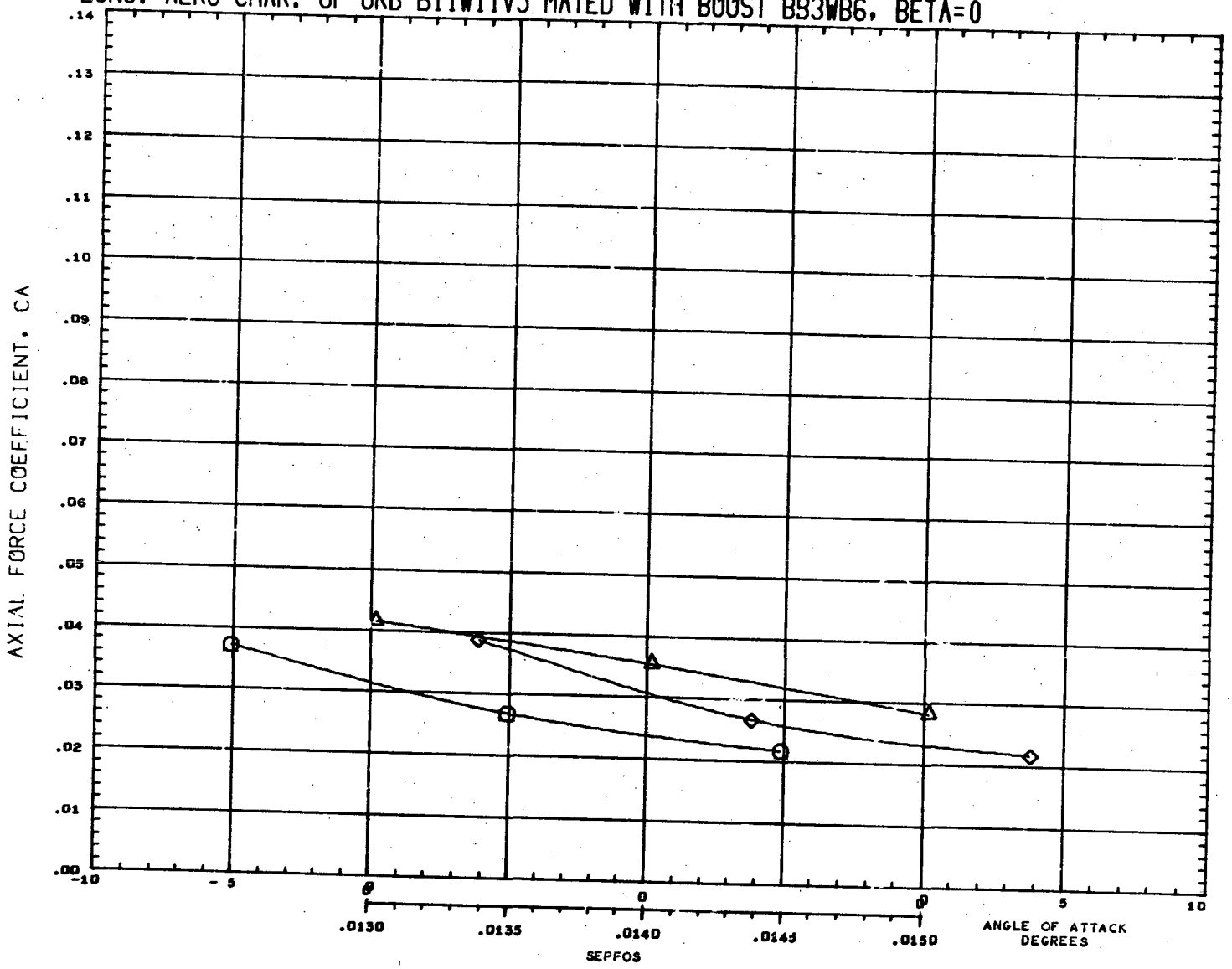


DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCUD20)	○	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCUD19)	△	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCUD23)	◇	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
5.847	5.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	6.8720	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

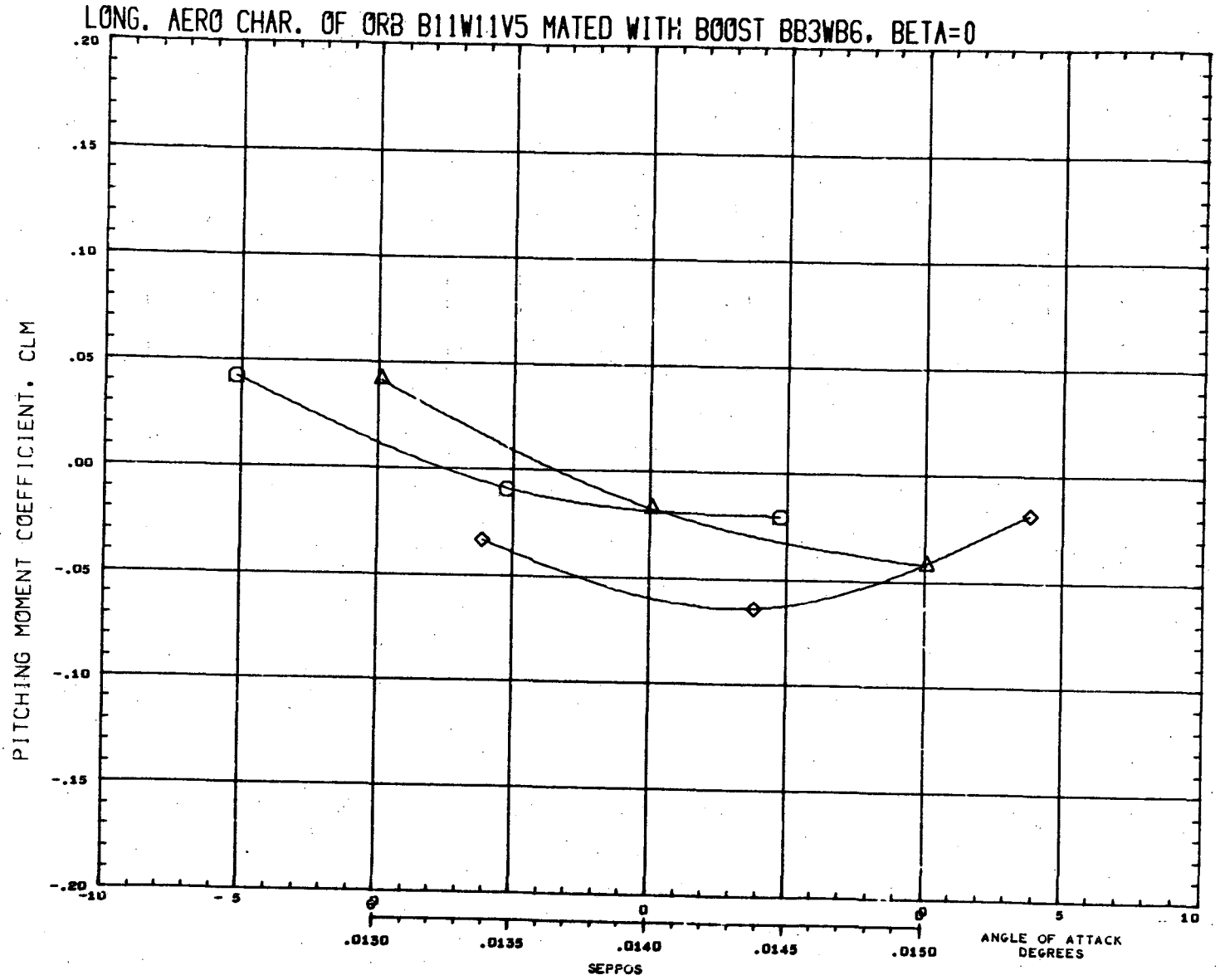
LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST BB3WB6, BETA=0



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU020)	○	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCU019)	△	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCU023)	◇	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
5.847	5.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



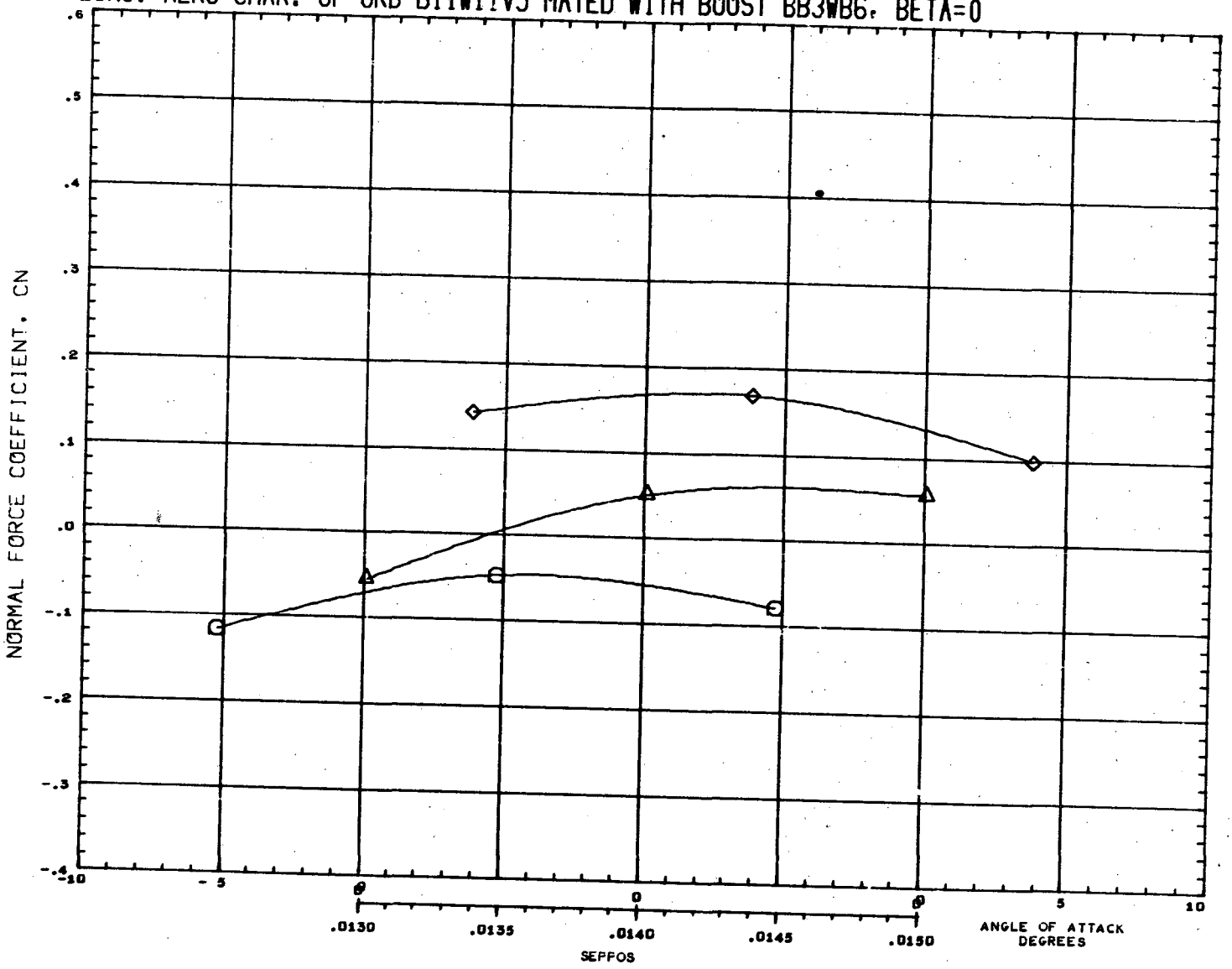
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU021)	○	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU018)	△	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU022)	◇	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0080	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST BB3WB6. BETA=0

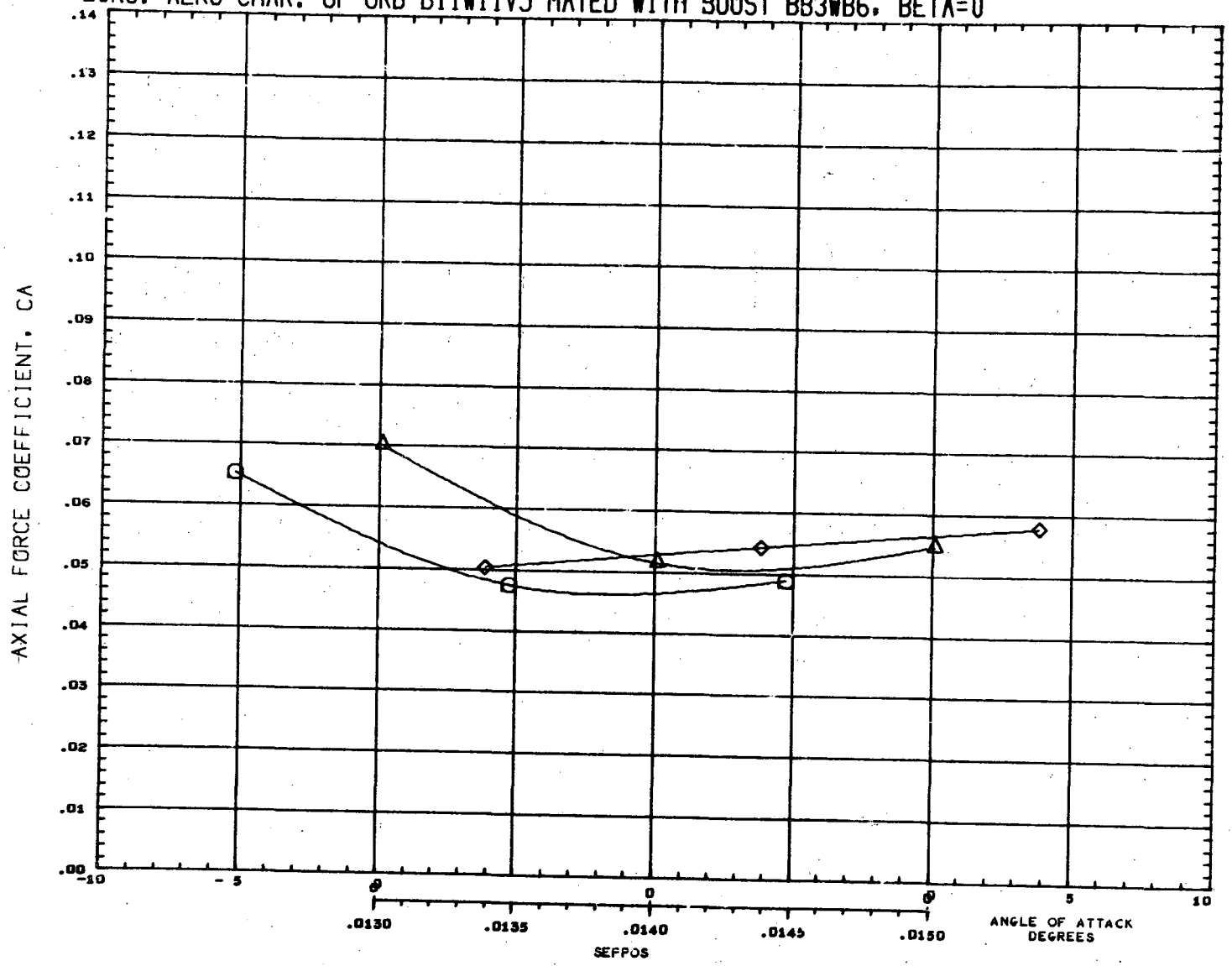


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD21)	○	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCUD18)	△	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6
(BCUD22)	◇	MSC S-3D ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	6.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST BB3WB6, BETA=0

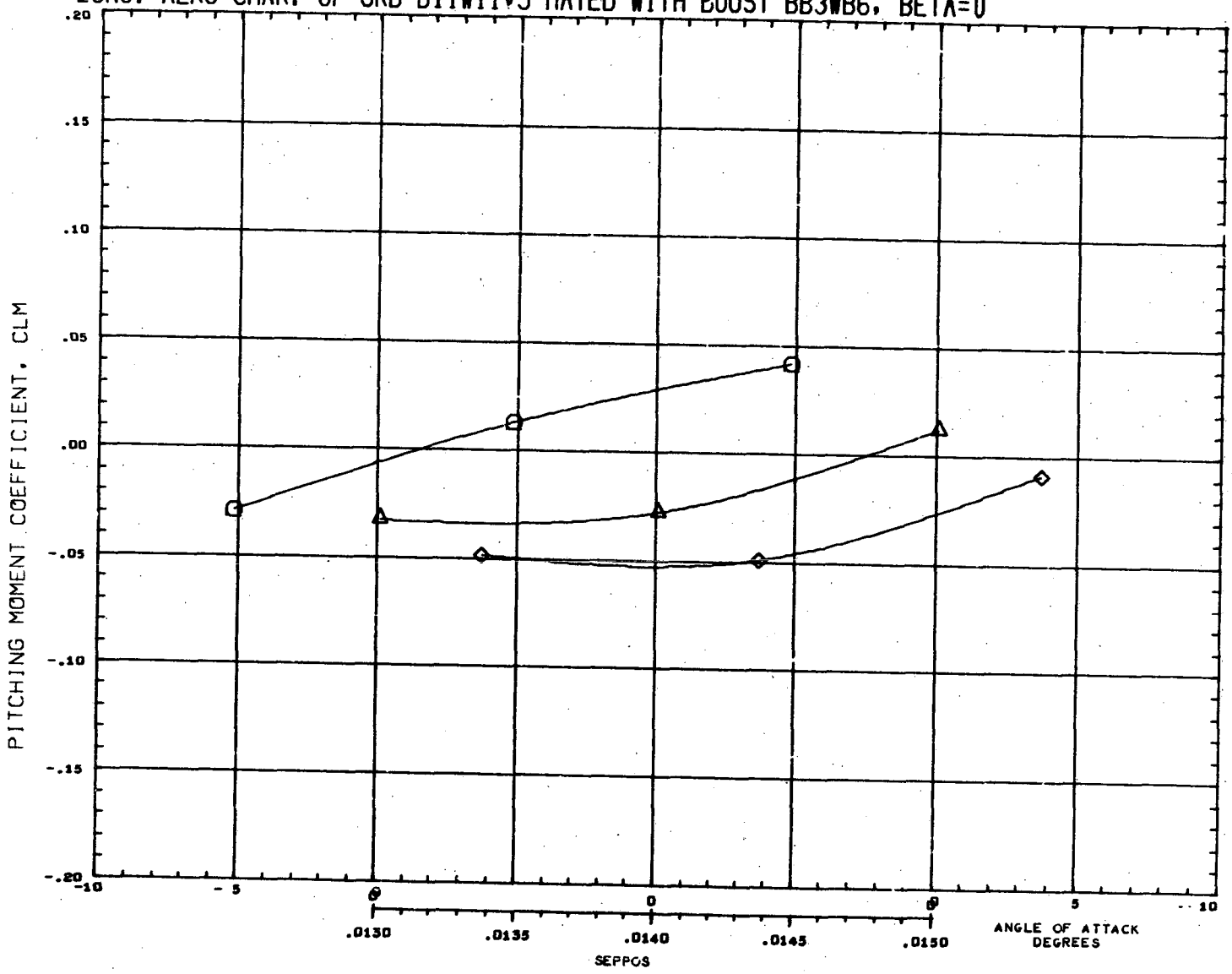


DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCU021)	○	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU018)	△	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU022)	◇	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST BB3WB6, BETA=0

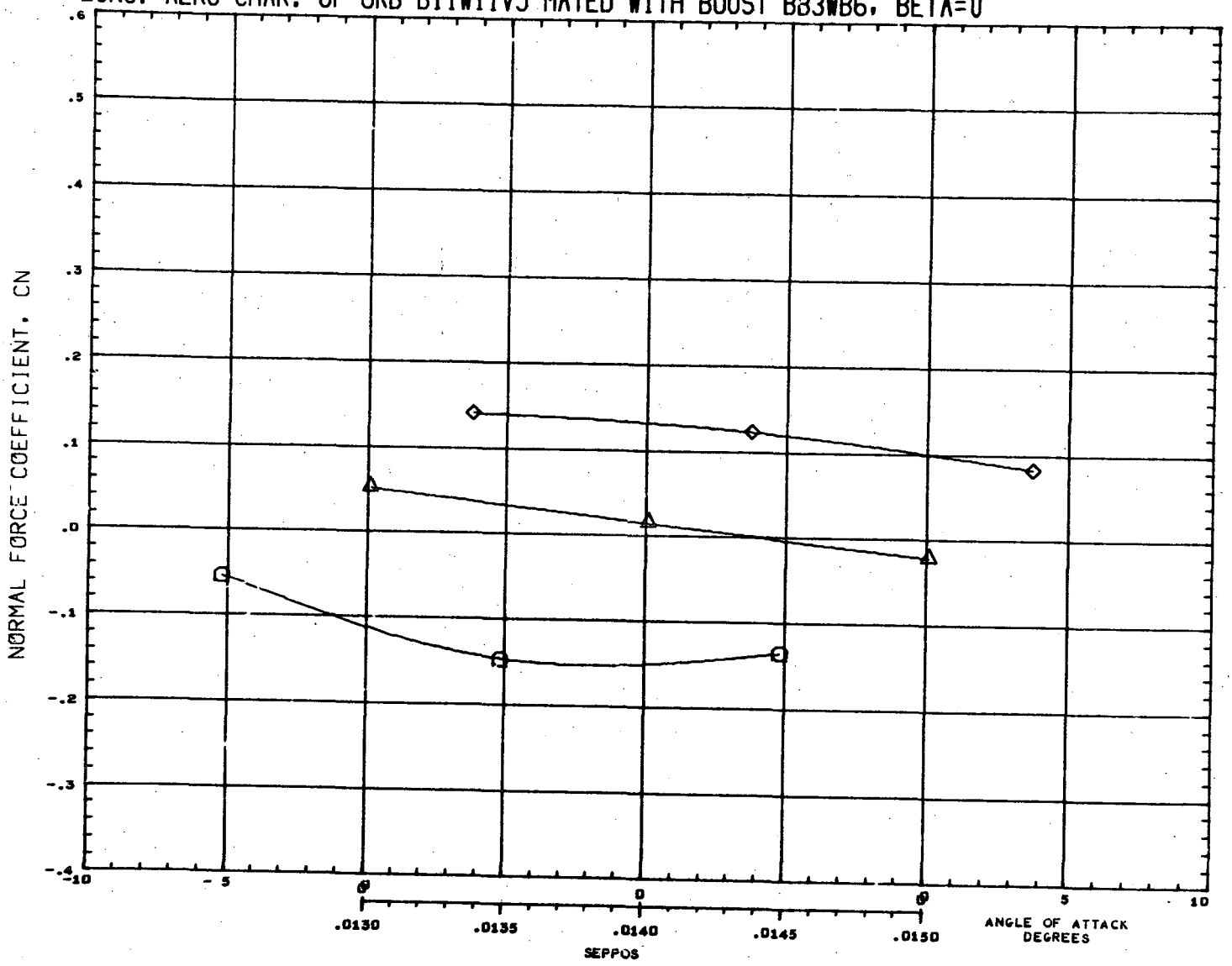


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU035)	○	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU024)	△	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU025)	◇	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALFB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.648	-0.008	1.370

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.0820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF ORB B11W11V5 MATED WITH BOOST B83WB6, BETA=0

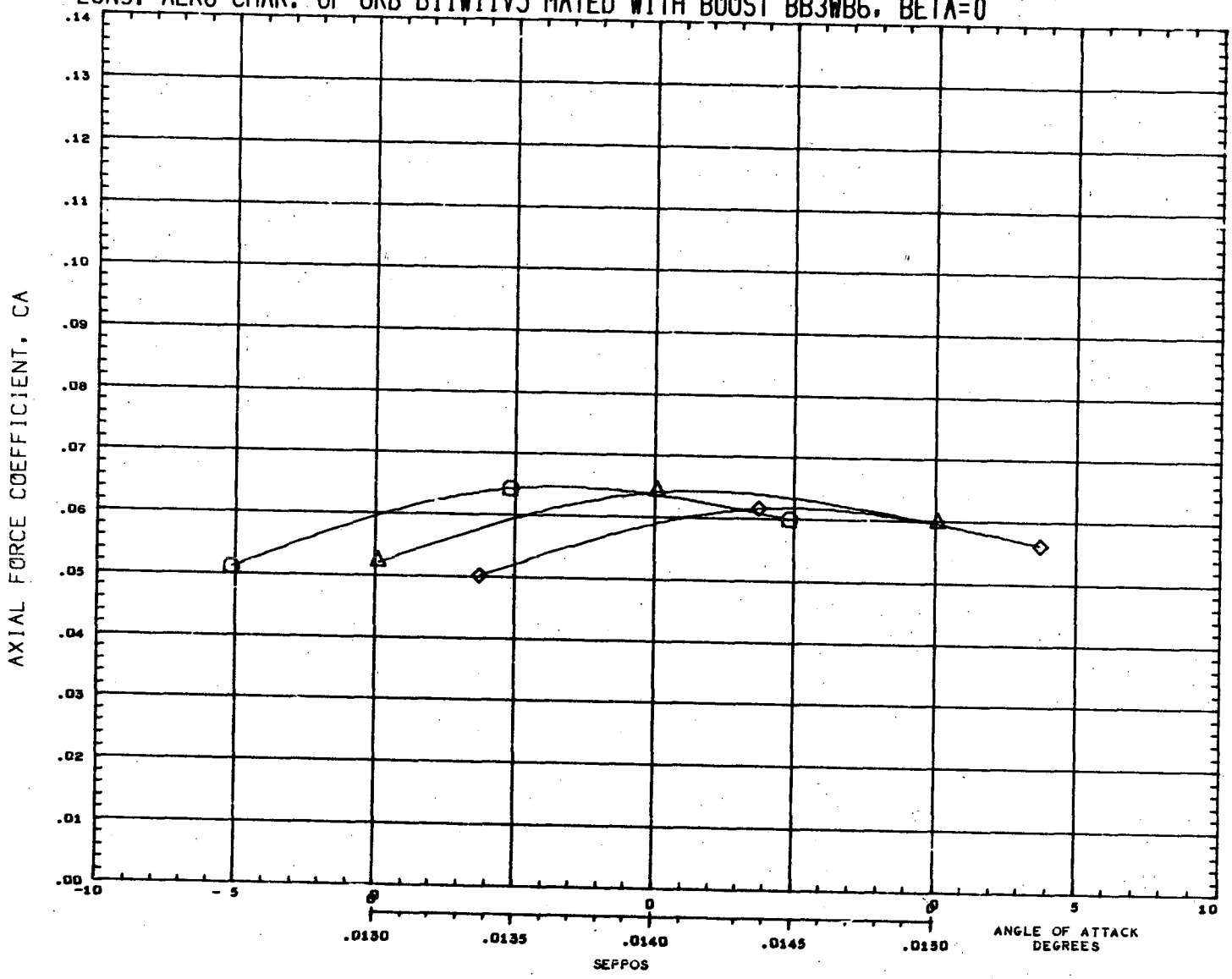


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU035)	○	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU024)	△	MSC S-3D ORBITER B11W11V5 NEAR B83WB6
(BCU025)	◇	MSC S-3D ORBITER B11W11V5 NEAR B83WB6

ALPHA	ALPB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.648	-0.008	1.370

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8823	IN
BREF	3.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LØNG. AERØ CHAR. ØF ØRB B11W11V5 MATED WITH BØØST BB3WB6, BETA=0

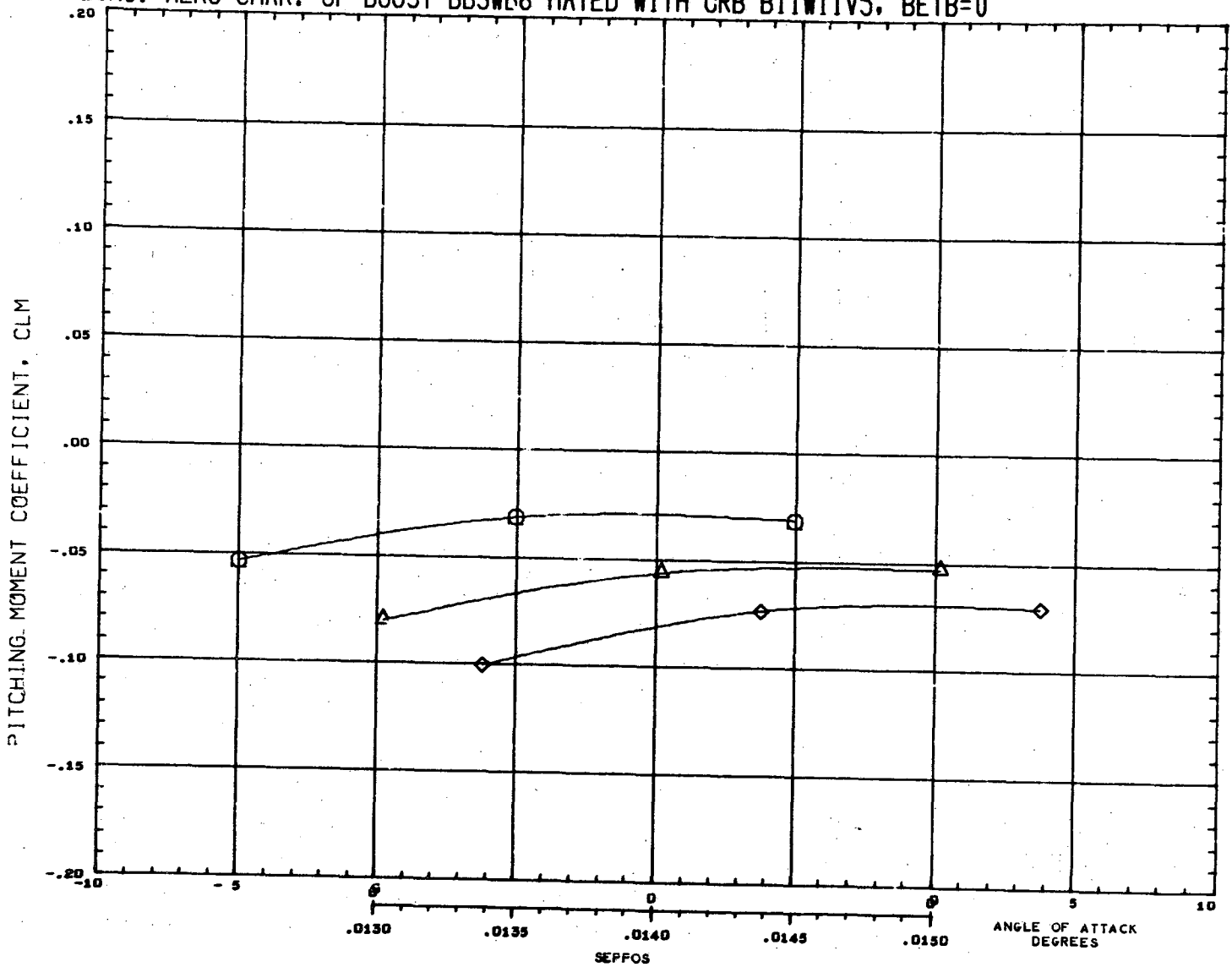


DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCU035)	○	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU024)	△	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6
(BCU025)	◇	MSC S-30 ORBITER B11W11V5 NEAR BB3WB6

ALPHA	ALPB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.6[illegible]8	-0.008	1.370

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3380	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH CRB B11W11V5, BETB=0



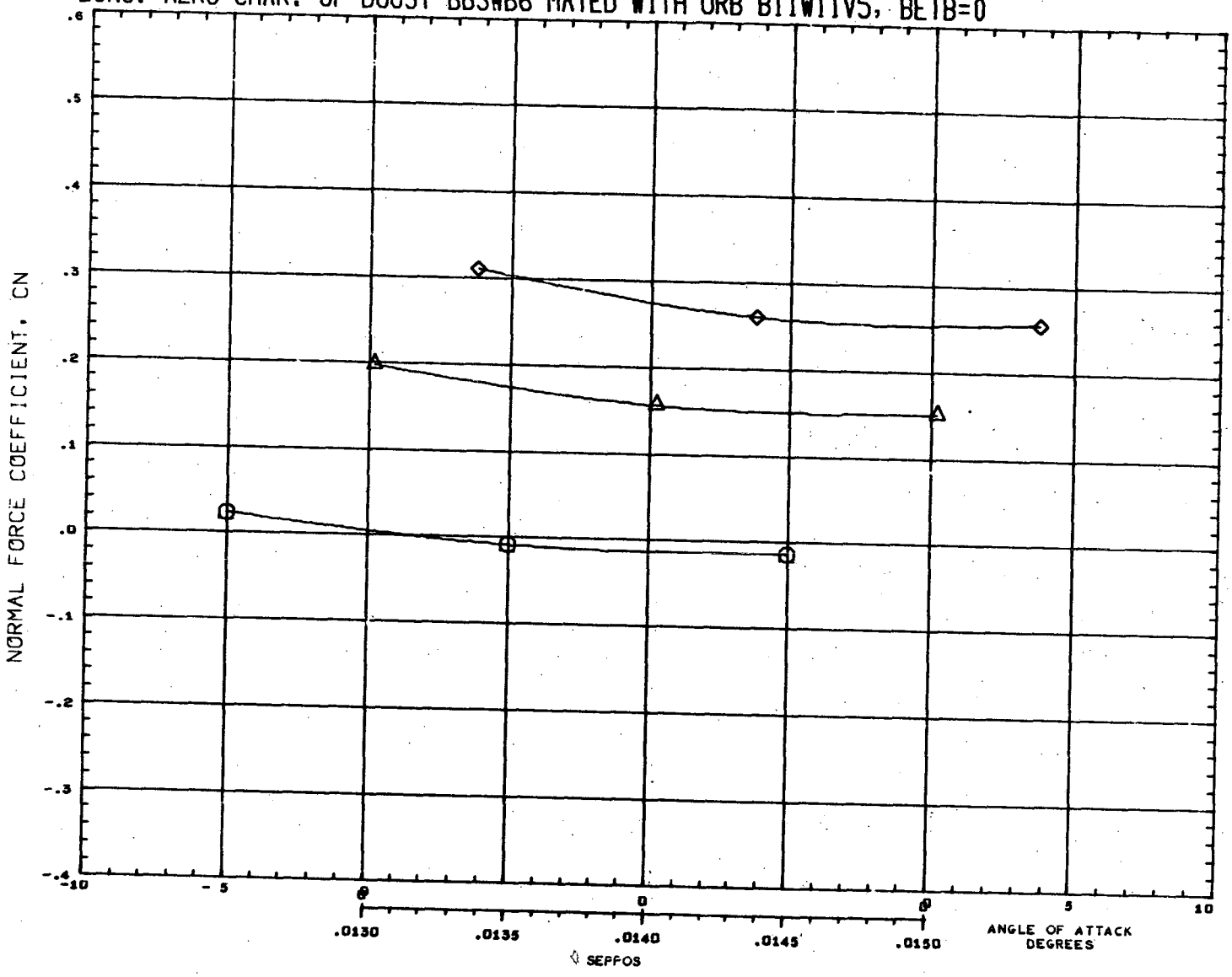
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU073)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU075)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU074)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.[illegible]3	-0.023	0.590
3.766	3.765	-0.020	0.600

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

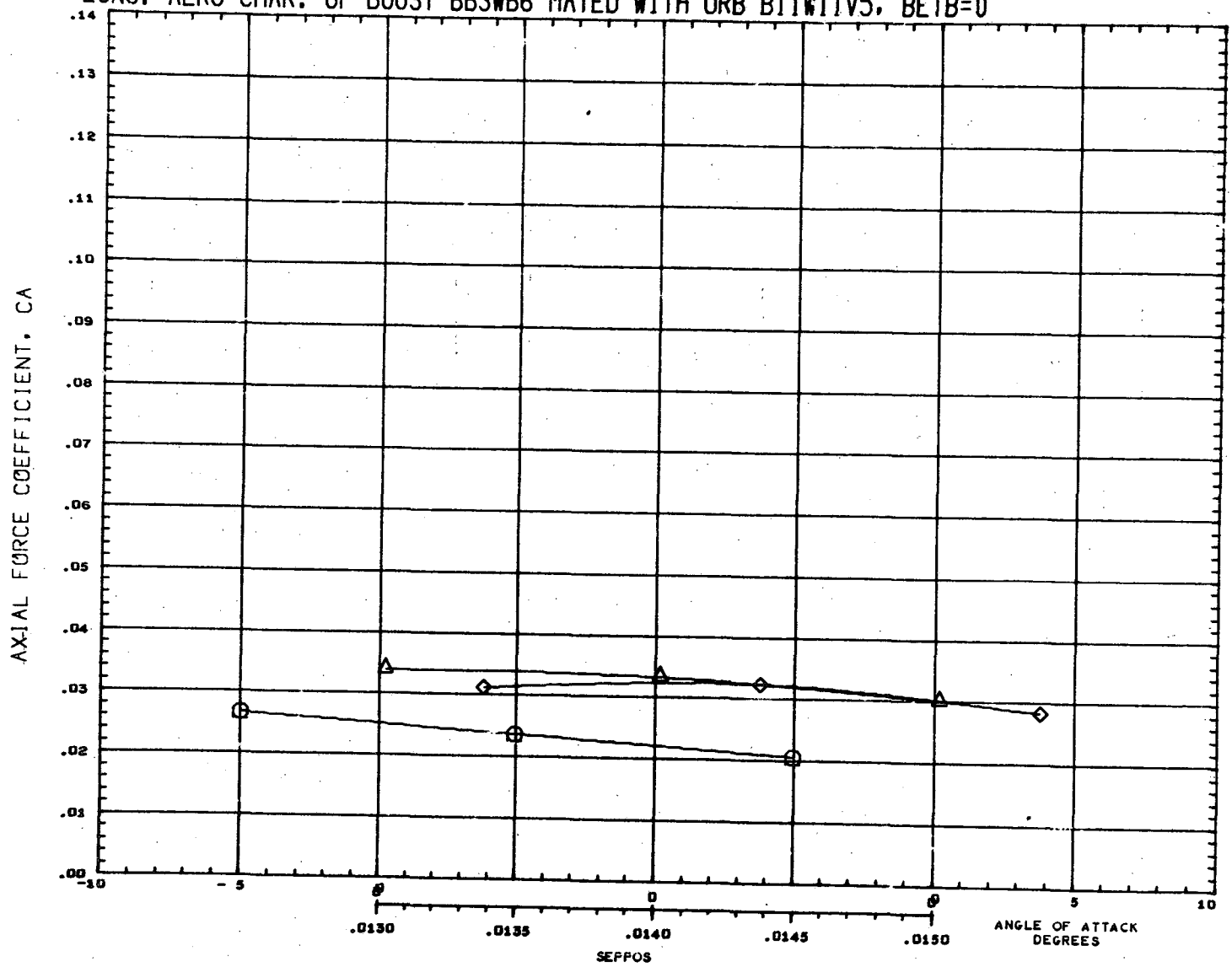


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU073)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU075)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU074)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.163	-0.023	0.590
3.786	3.765	-0.020	0.600

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3710	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

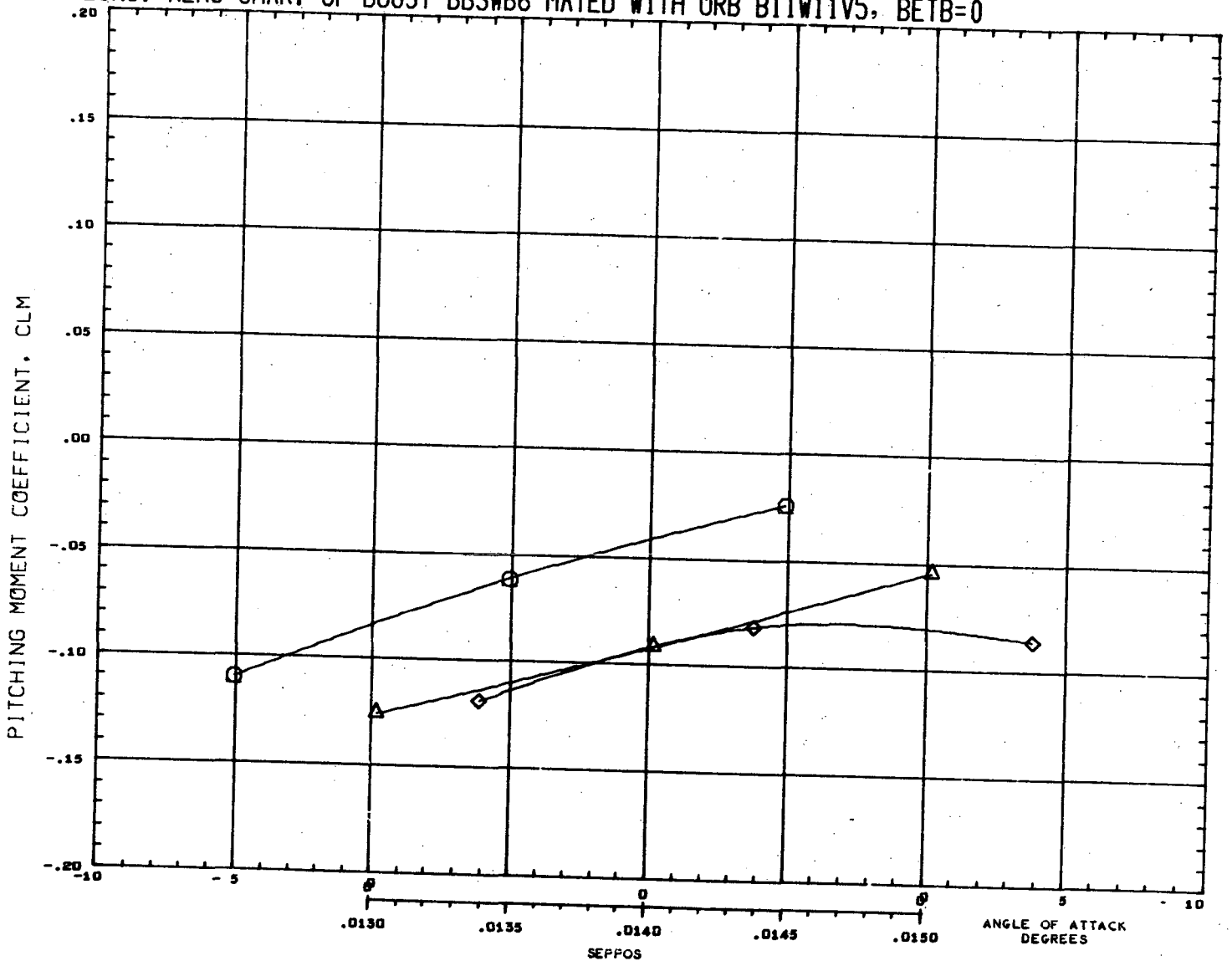


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU073)	○	NSC S-3D BOOSTER BB3WB6 NEAR B11W11V5
(BCU075)	△	NSC S-3D BOOSTER BB3WB6 NEAR B11W11V5
(BCU074)	◇	NSC S-3D BOOSTER BB3W36 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.034	-5.069	-0.025	0.600
0.175	0.163	-0.023	0.590
3.786	3.765	-0.020	0.600

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3745	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LØNG. AERØ CHAR. ØF BØØST BB3WB6 MATED WITH ØRB B11W11V5, BETB=0

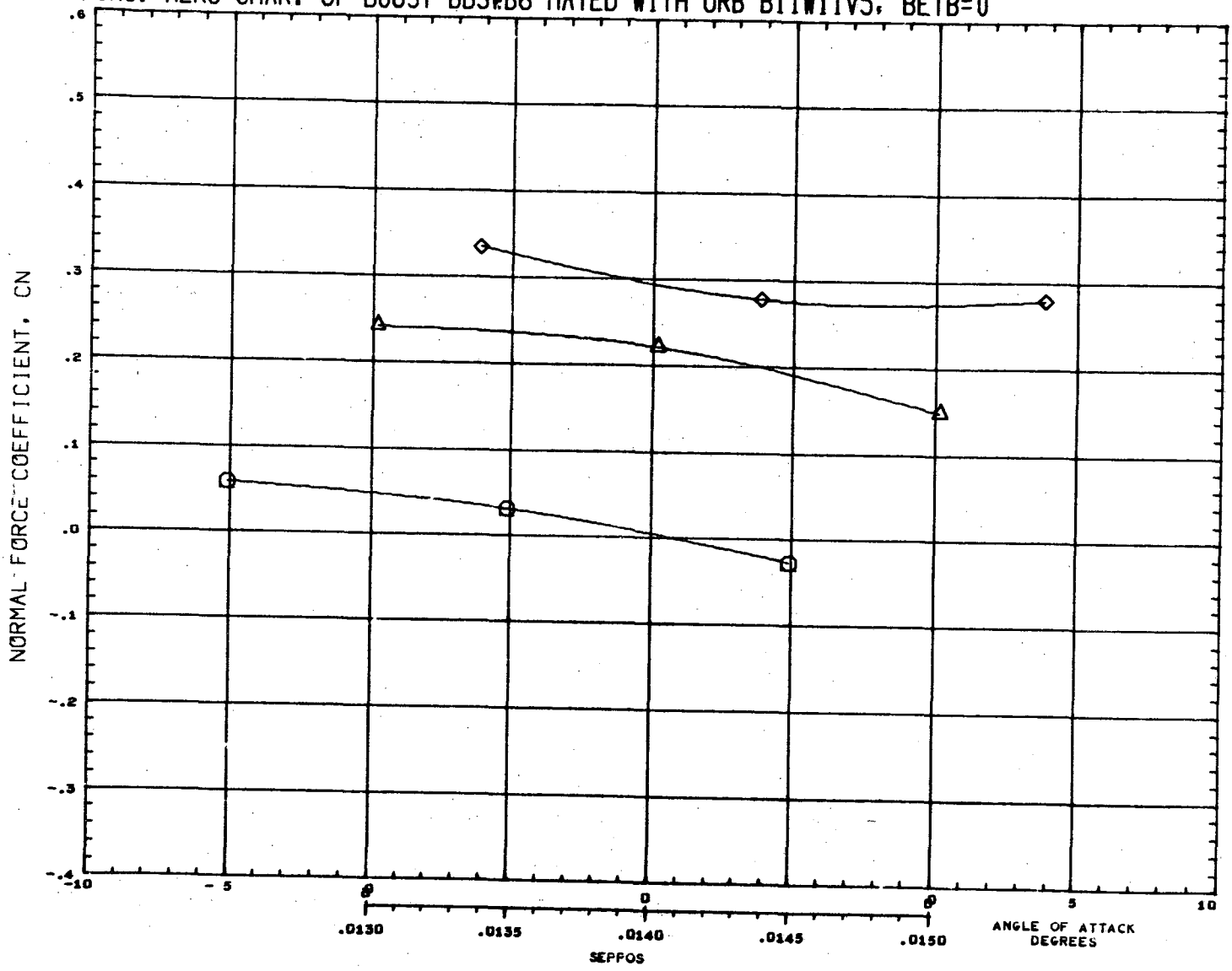


DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCUD60)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD59)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD63)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
3.847	3.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3700	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

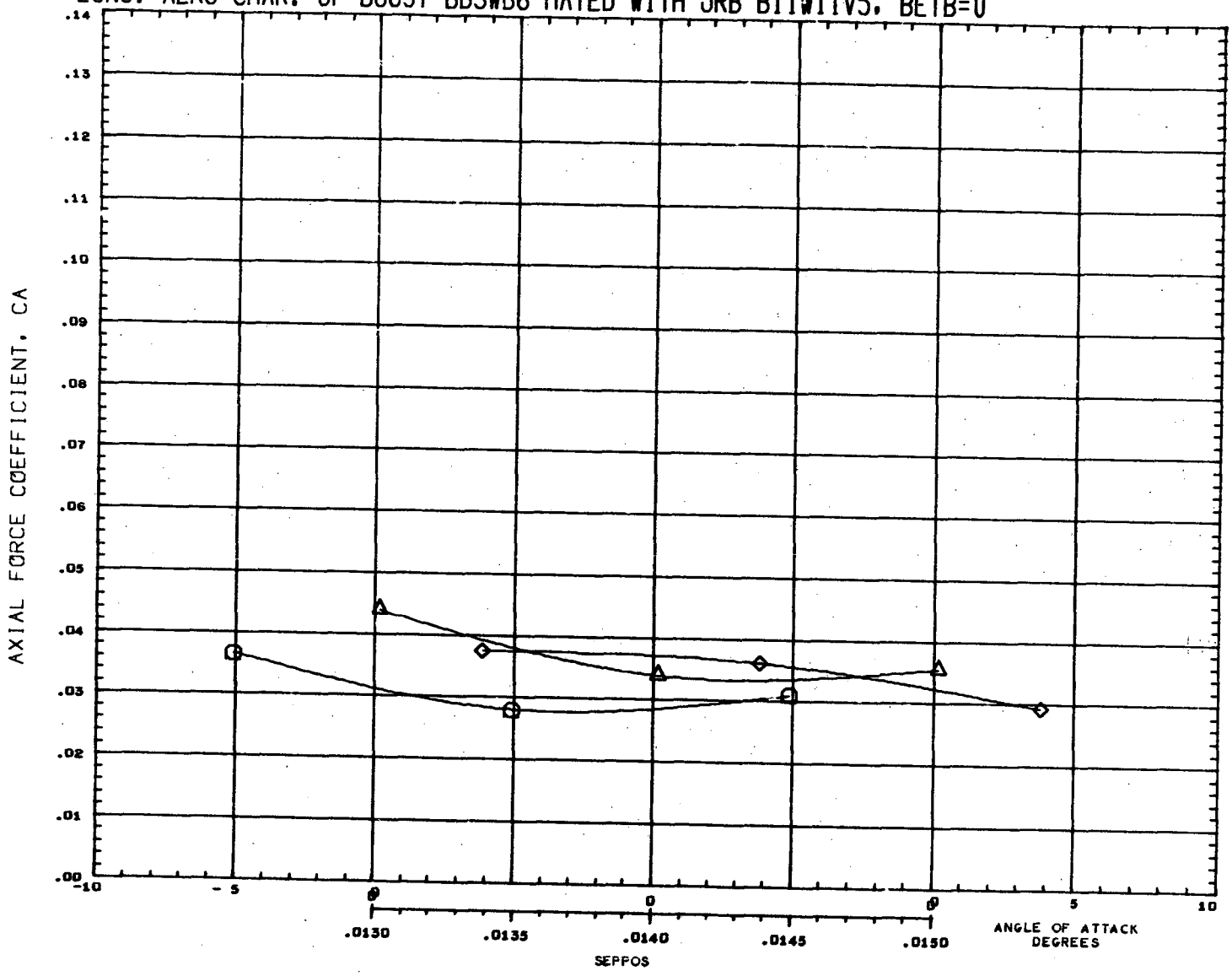


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU060)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU059)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU063)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
3.847	3.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3700	IN
XMRP	15.9990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

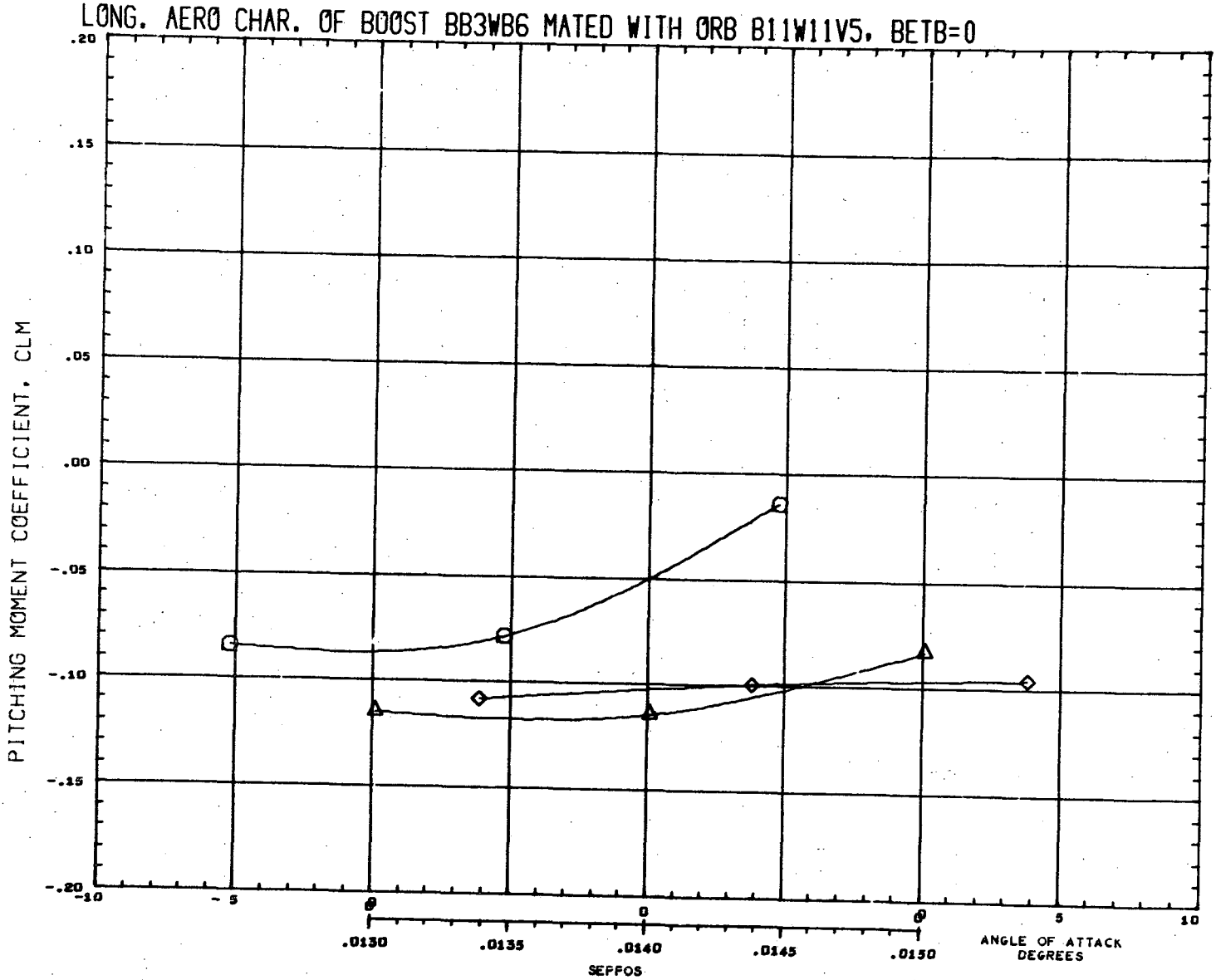
LØNG. AERØ CHAR. ØF BØØST BB3WB6 MATED WITH ØRB B11W11V5. BETB=0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BCU060) ○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU059) △	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU063) ◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.205	-5.212	-0.033	0.890
0.150	0.169	-0.009	0.890
3.847	3.858	-0.044	0.890

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



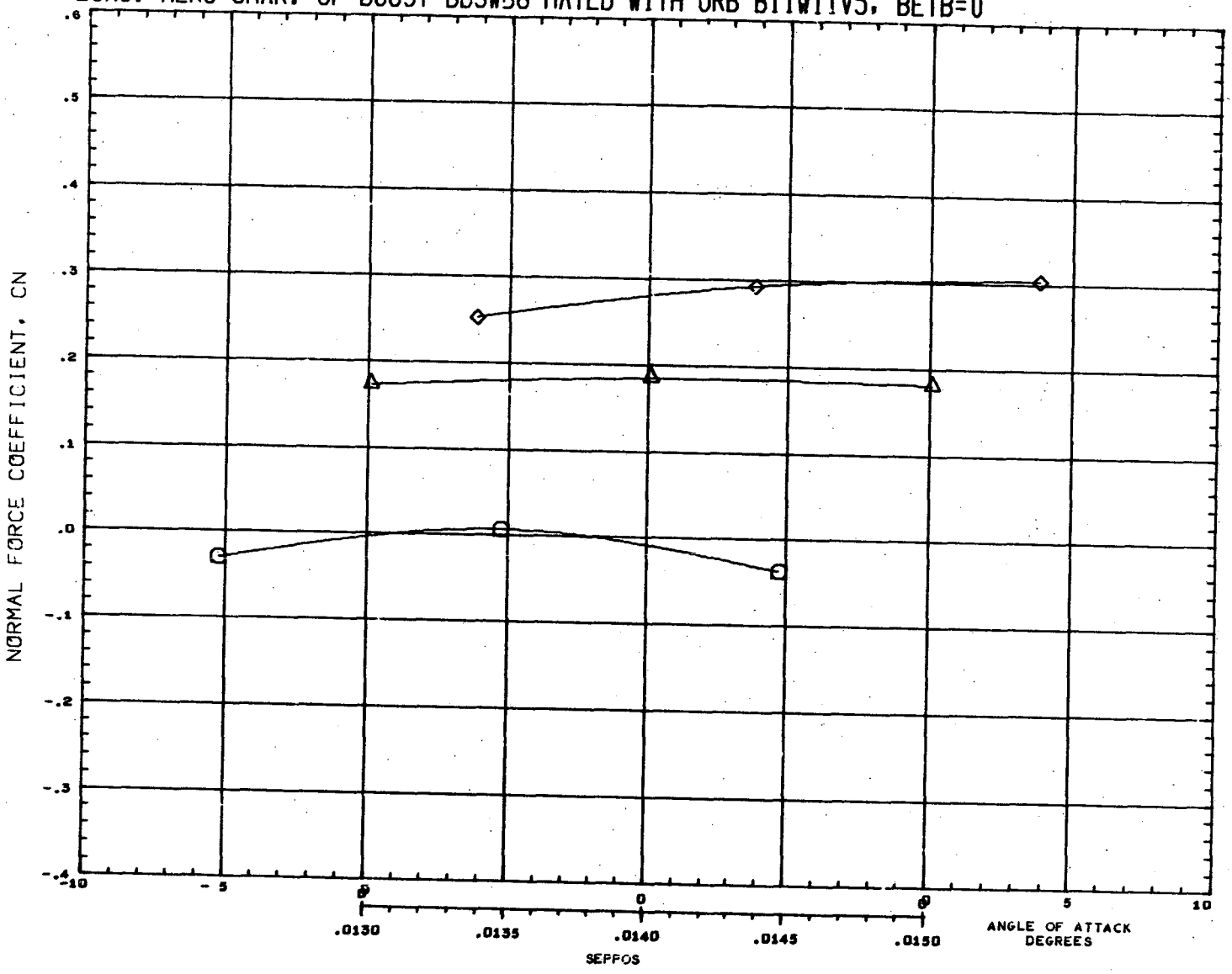
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU061)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU058)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU062)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LØNG. AERØ CHAR. ØF BØØST BB3WB6 MATED WITH ØRB B11W11V5, BETB=0

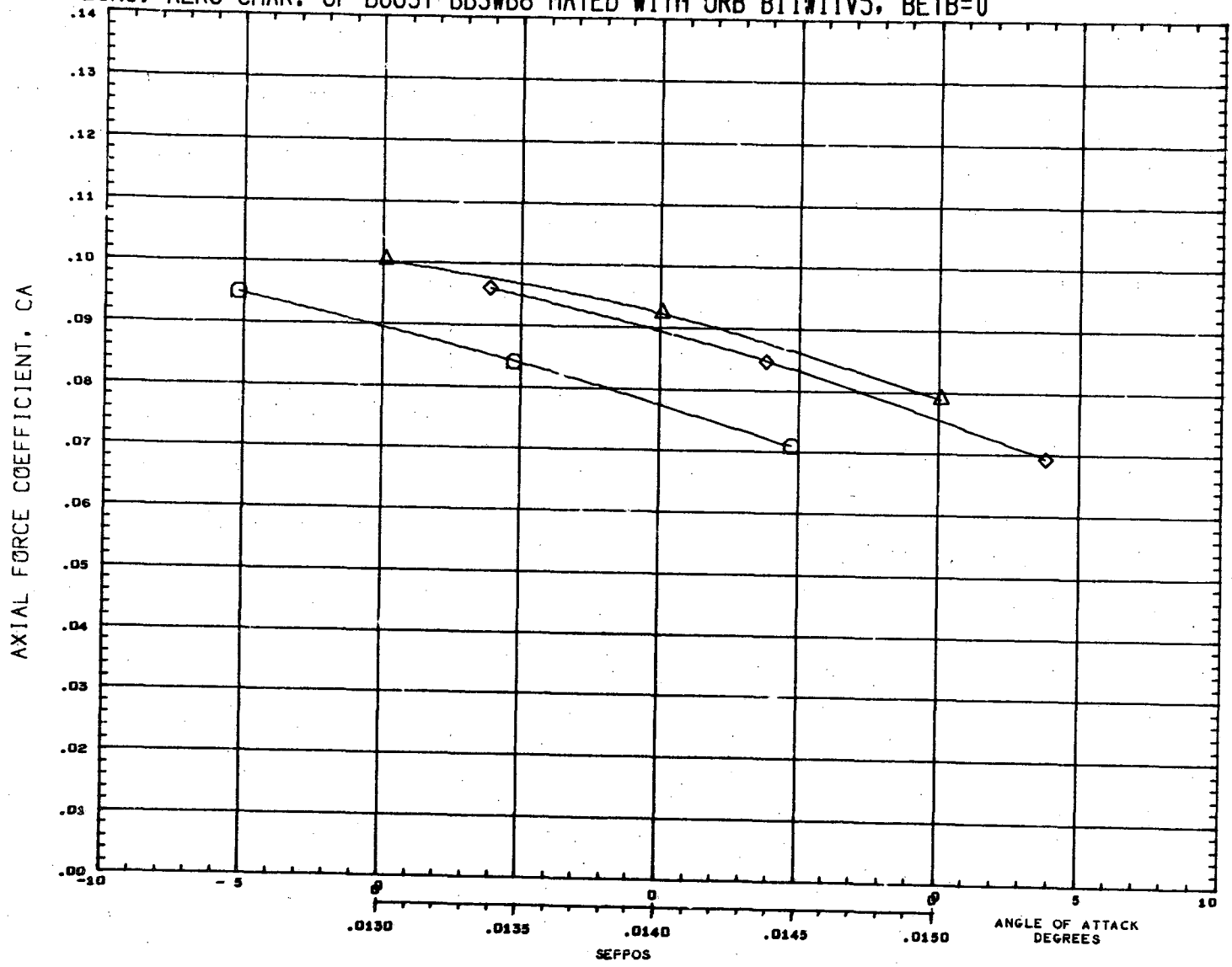


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD61)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD58)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD62)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION		
SREF	106.6460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.6990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

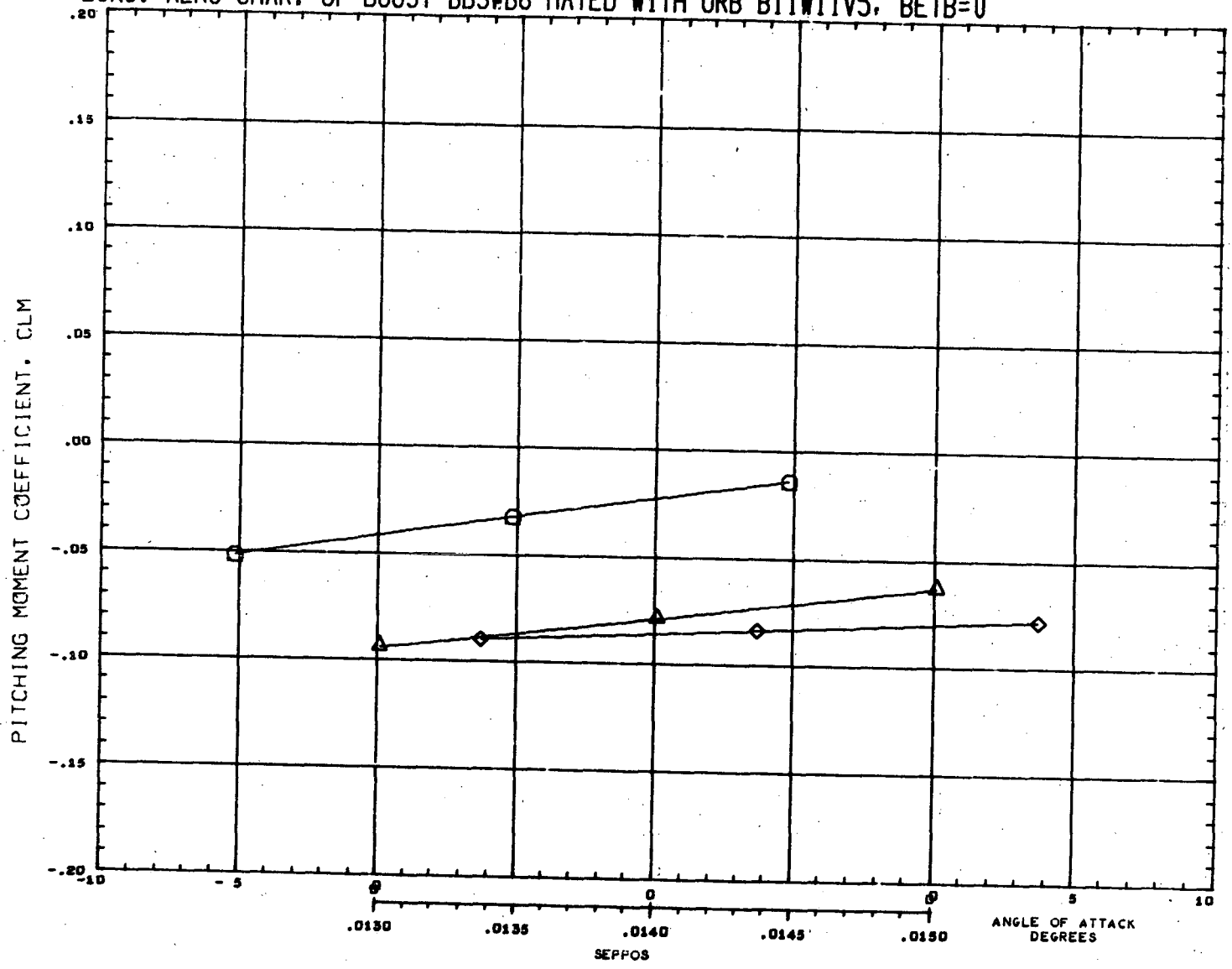


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD61)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD58)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD62)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.348	-5.364	-0.033	1.090
0.046	0.062	-0.019	1.090
3.740	3.757	-0.035	1.090

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

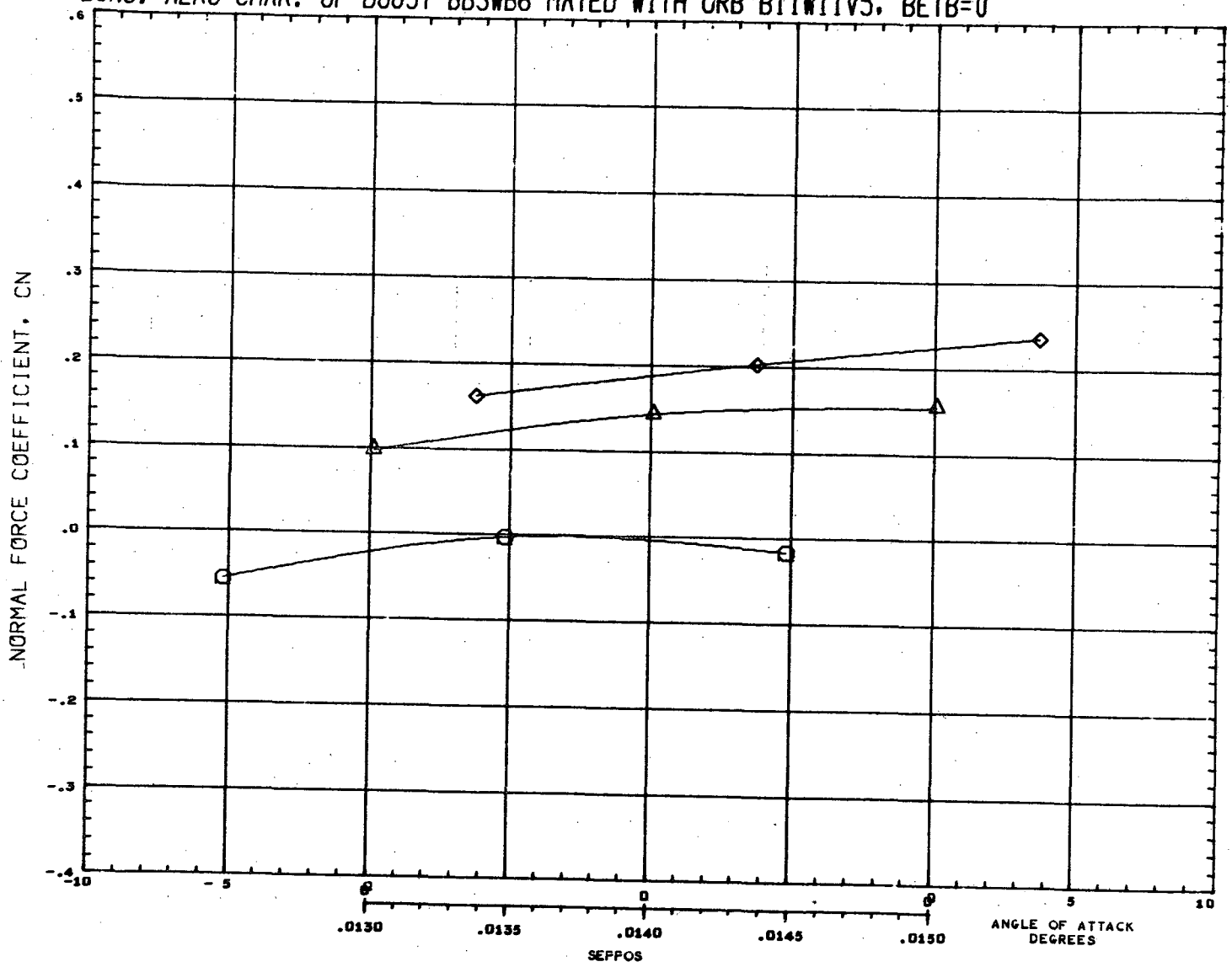


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD72)	○	MSC S-3D BOOSTER BB3WB6 NEAR B11W11V5
(BCUD64)	△	MSC S-3D BOOSTER BB3WB6 NEAR B11W11V5
(BCUD65)	◇	MSC S-3D BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.648	-0.008	1.370

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3700	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0

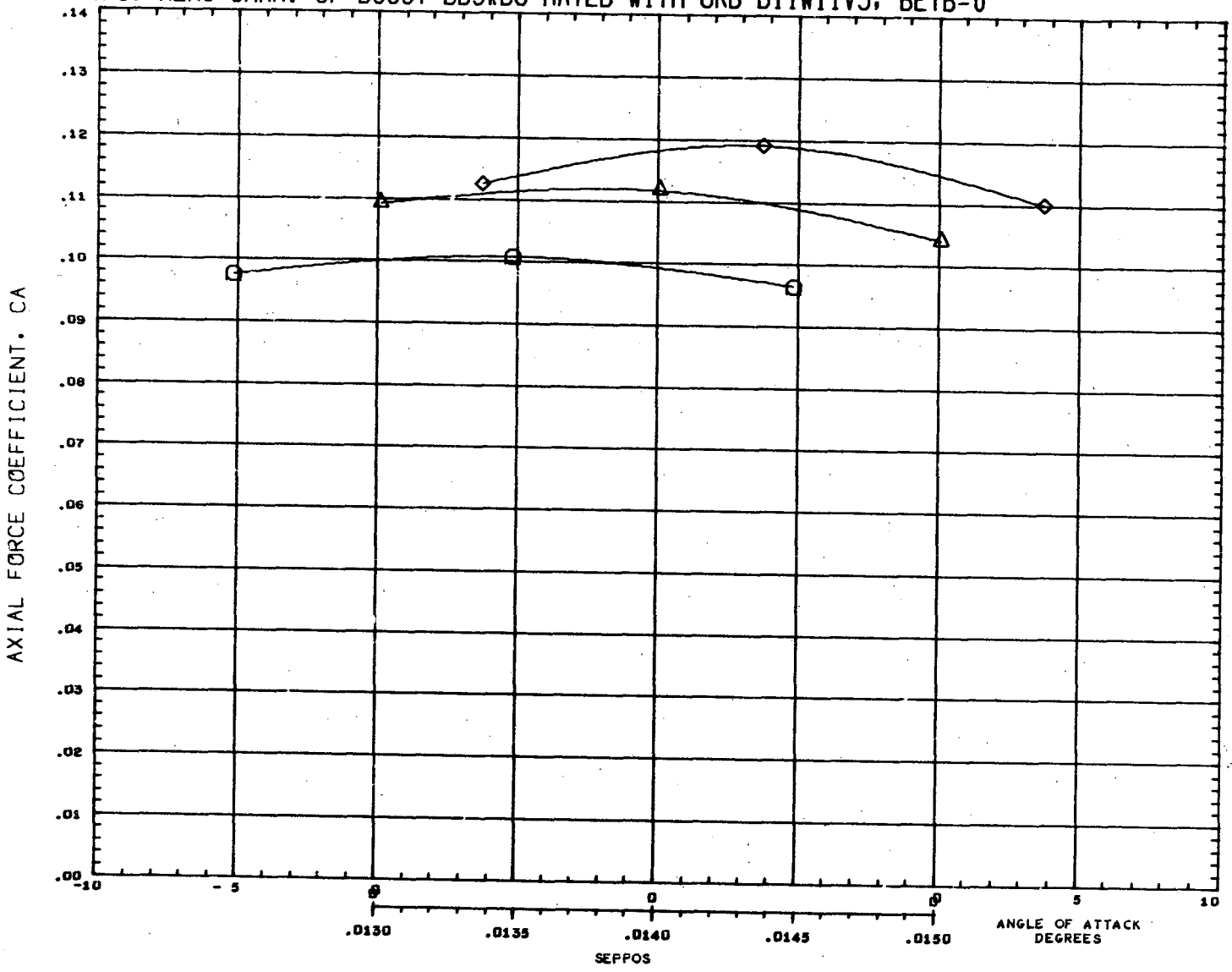


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCUD72)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD64)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCUD65)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.648	-0.008	1.370

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.374[illegible]	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

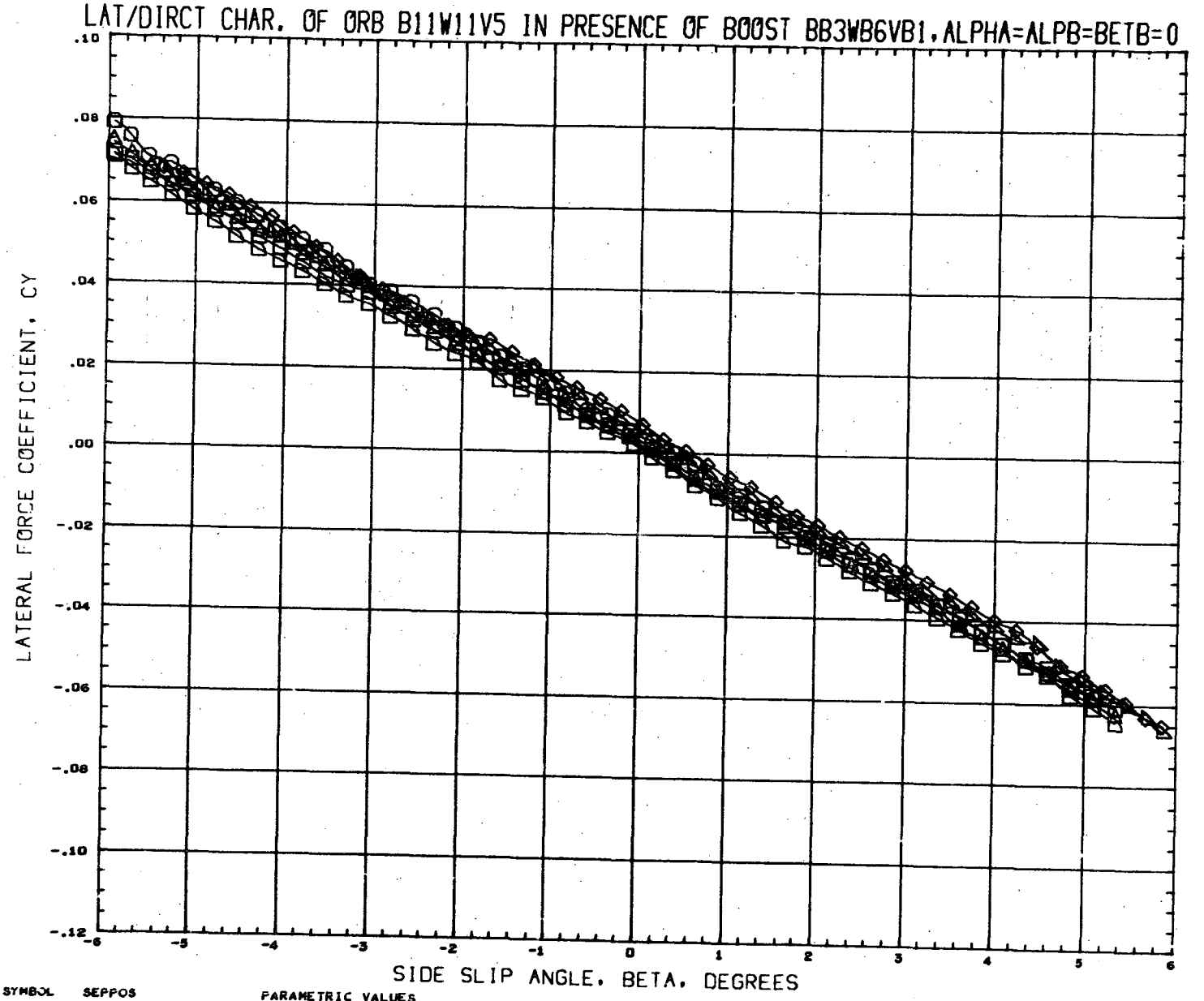
LONG. AERO CHAR. OF BOOST BB3WB6 MATED WITH ORB B11W11V5, BETB=0



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCU072)	○	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU064)	△	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5
(BCU065)	◇	MSC S-30 BOOSTER BB3WB6 NEAR B11W11V5

ALPHA	ALPB	BETA	MACH
-5.360	-5.373	-0.048	1.380
-0.060	-0.046	-0.036	1.370
3.614	3.648	-0.008	1.370

REFERENCE INFORMATION		
SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3700	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



SYMBOL	SEPPOS
▽	0.003
△	0.004
○	0.006
□	0.008
◇	0.009
▷	0.012

PARAMETRIC VALUES

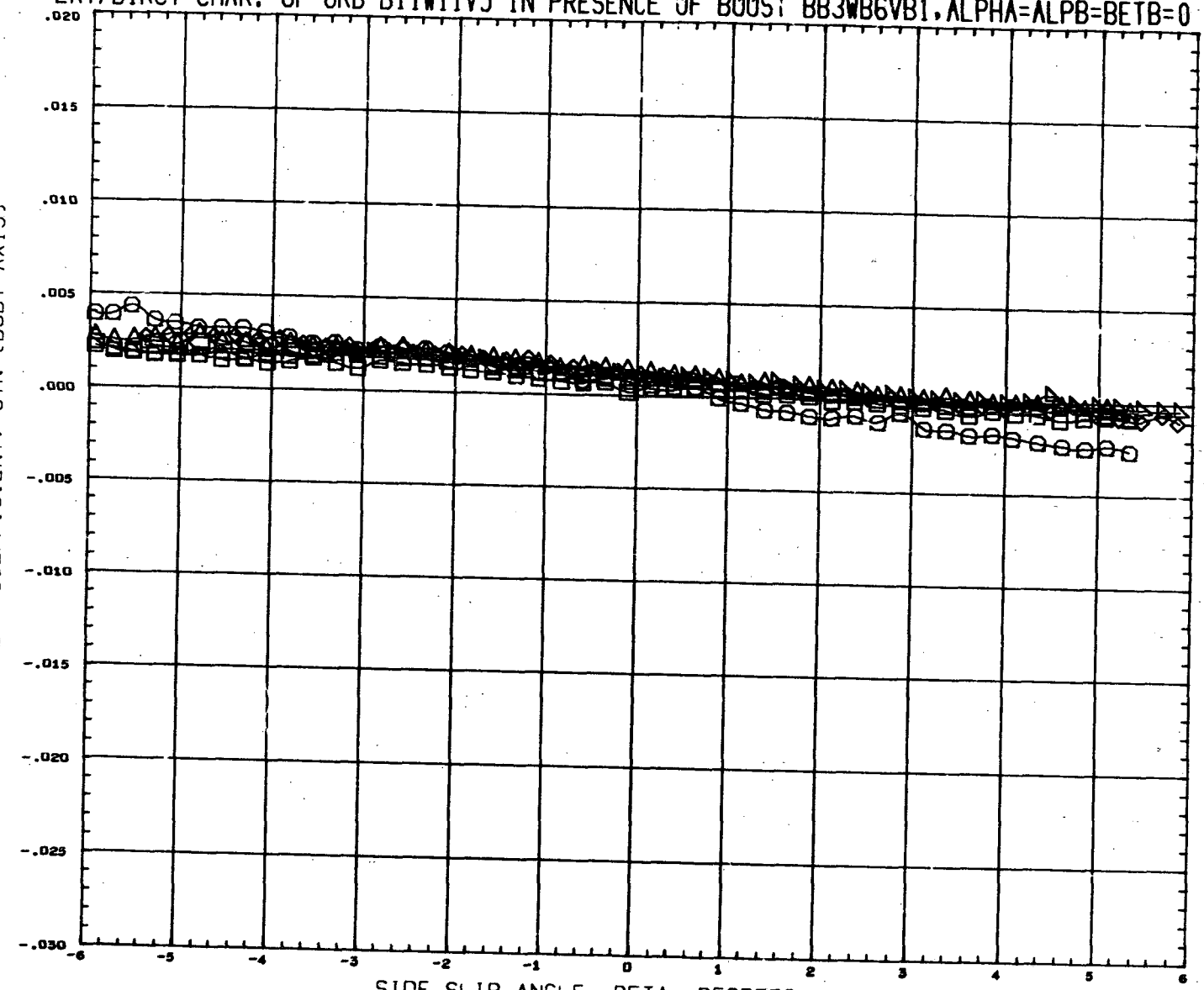
ALPHA	0.047	MACH		0.600
ALPB	0.139	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEFPOS
□	0.003
▽	0.004
◇	0.006
△	0.008
○	0.009
	0.012

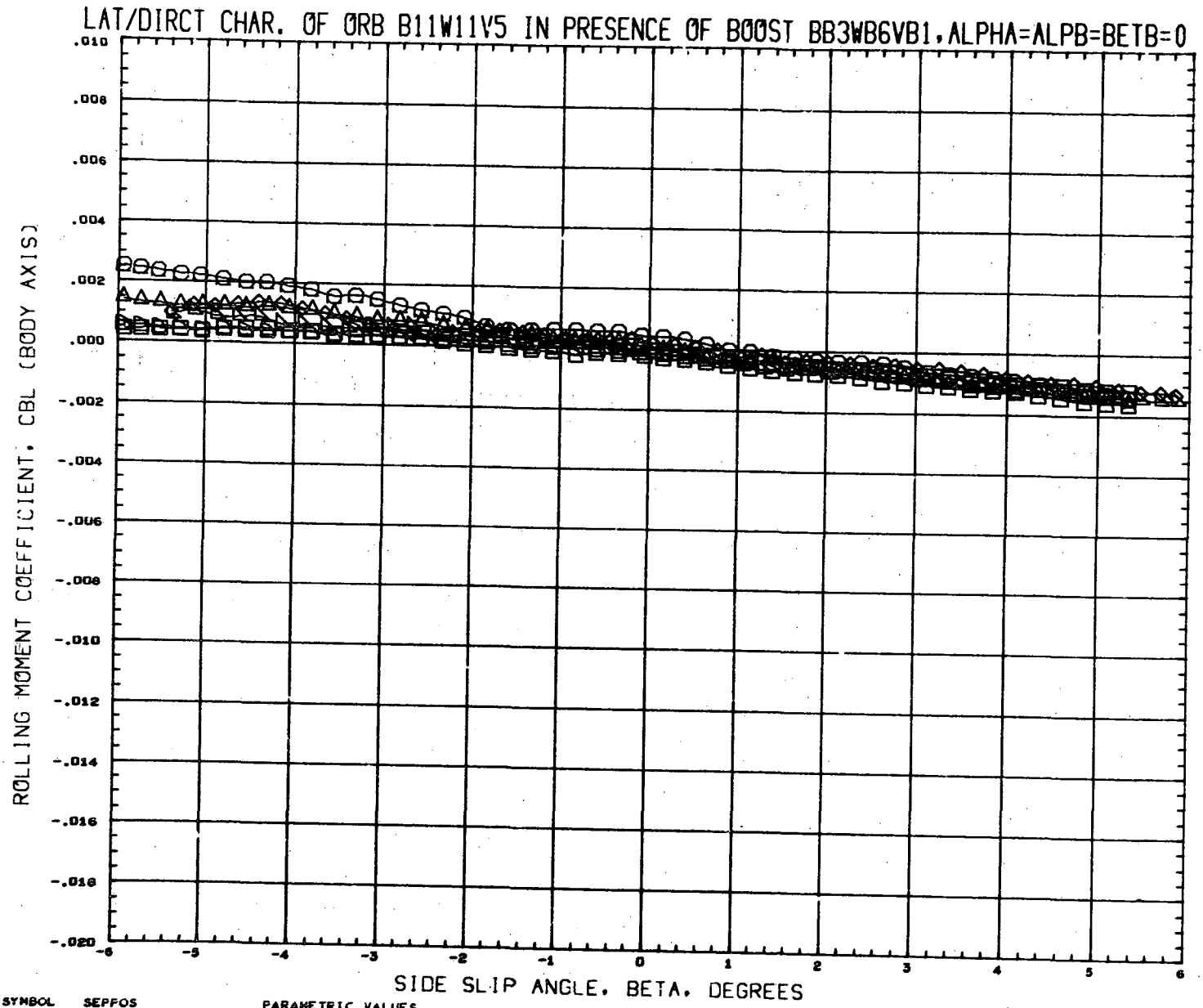
PARAMETRIC VALUES

ALPHA	0.047	MACH		0.600
ALPB	0.139	BETB	-	0.008

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPFOS
○	0.003
△	0.004
◇	0.006
□	0.008
▷	0.009
D	0.012

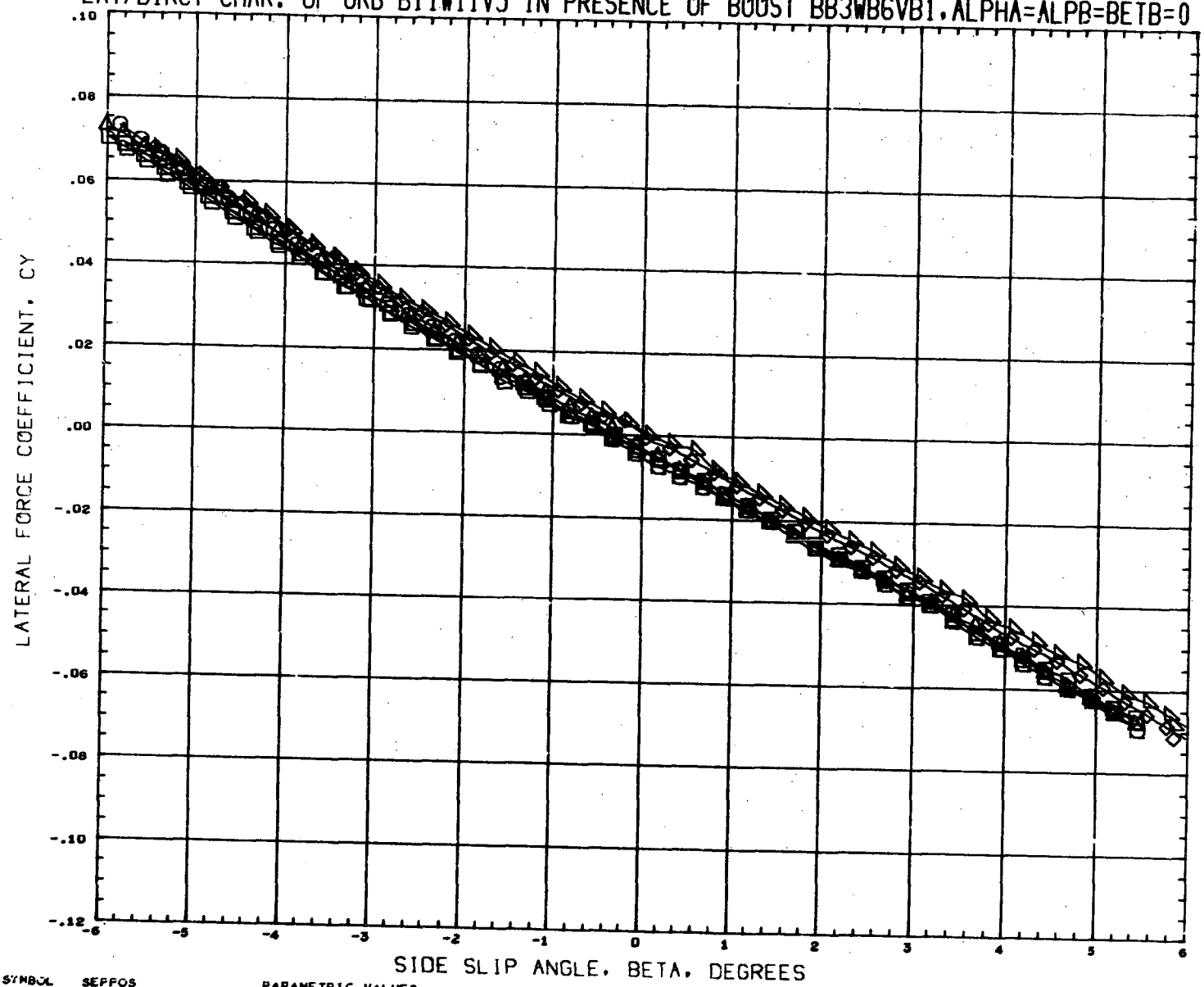
PARAMETRIC VALUES

ALPHA	0.047	MACH		0.600
ALPB	0.139	BETB	-	0.008
REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEFFOS
△	0.003
□	0.004
◇	0.006
▽	0.008
⬠	0.009
○	0.012

PARAMETRIC VALUES

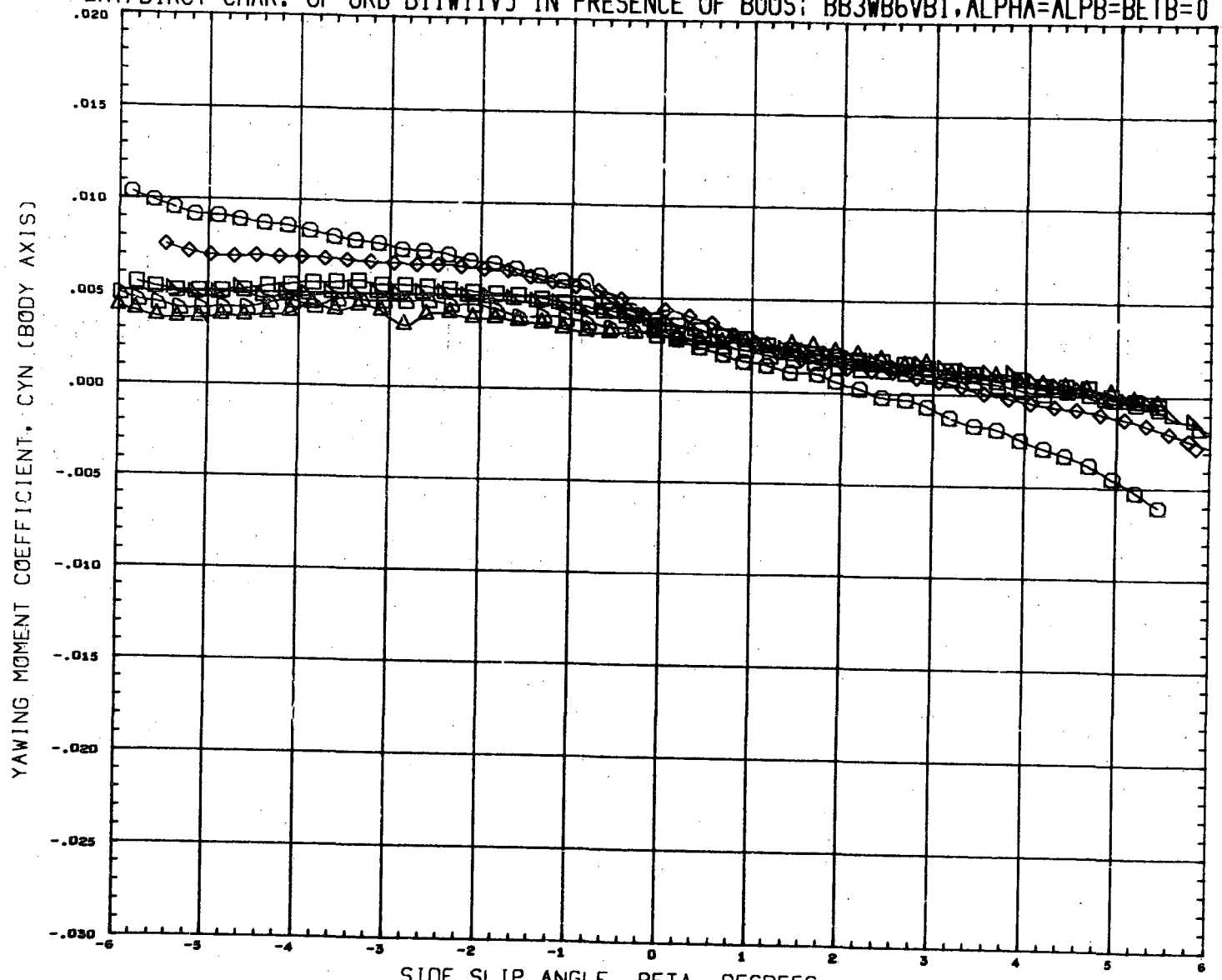
ALPHA	0.044	MACH		0.890
ALPB	0.189	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8730	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0

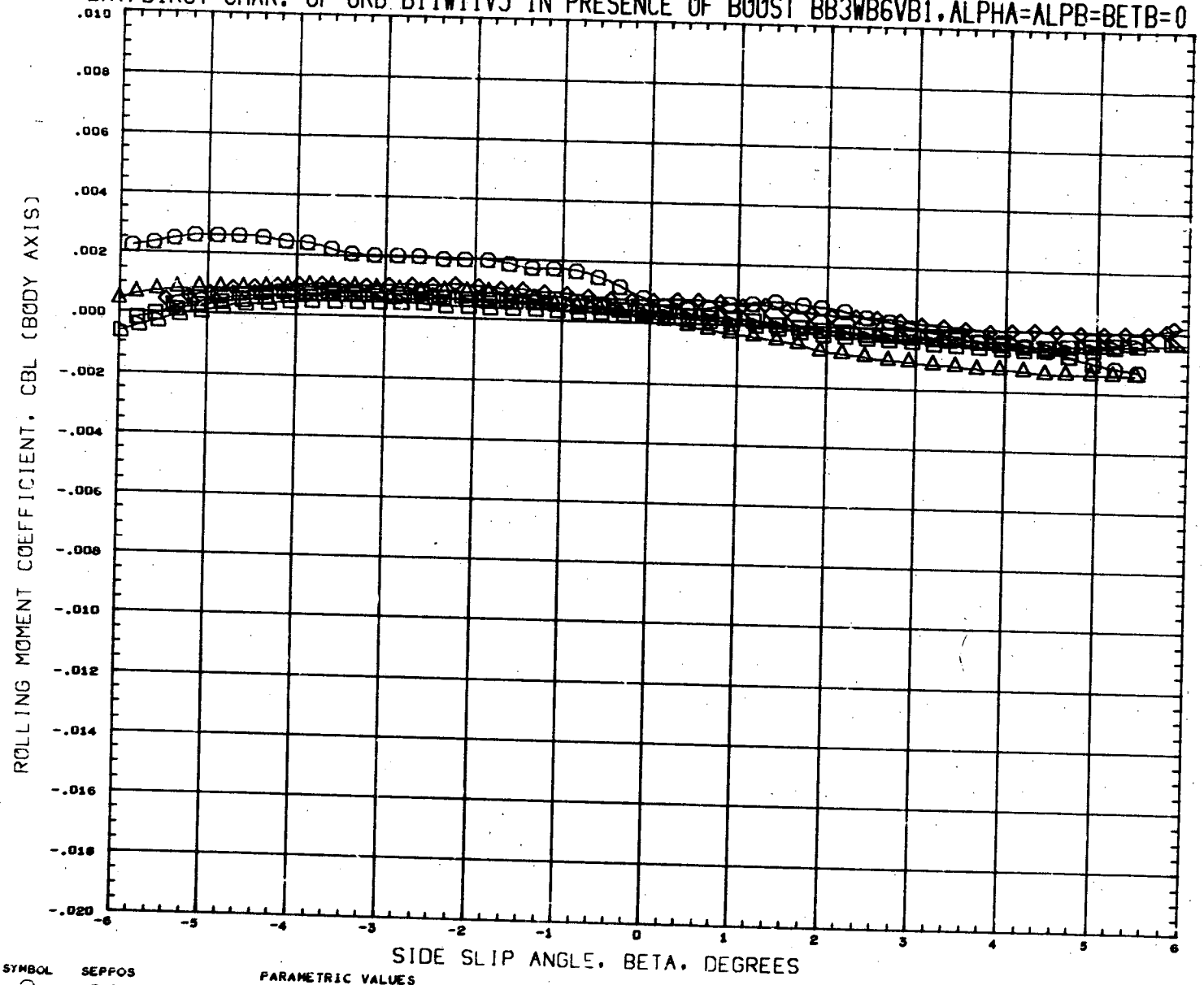


SYMBOL	SEPPOS		PARAMETRIC VALUES		
	0.003	ALPHA	0.044	MACH	0.890
	0.004	ALPB	0.189	BETB	- 0.006
	0.006				
	0.008				
	0.009				
	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3680	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1. ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
☐	0.004
◇	0.006
△	0.008
○	0.009
	0.012

PARAMETRIC VALUES

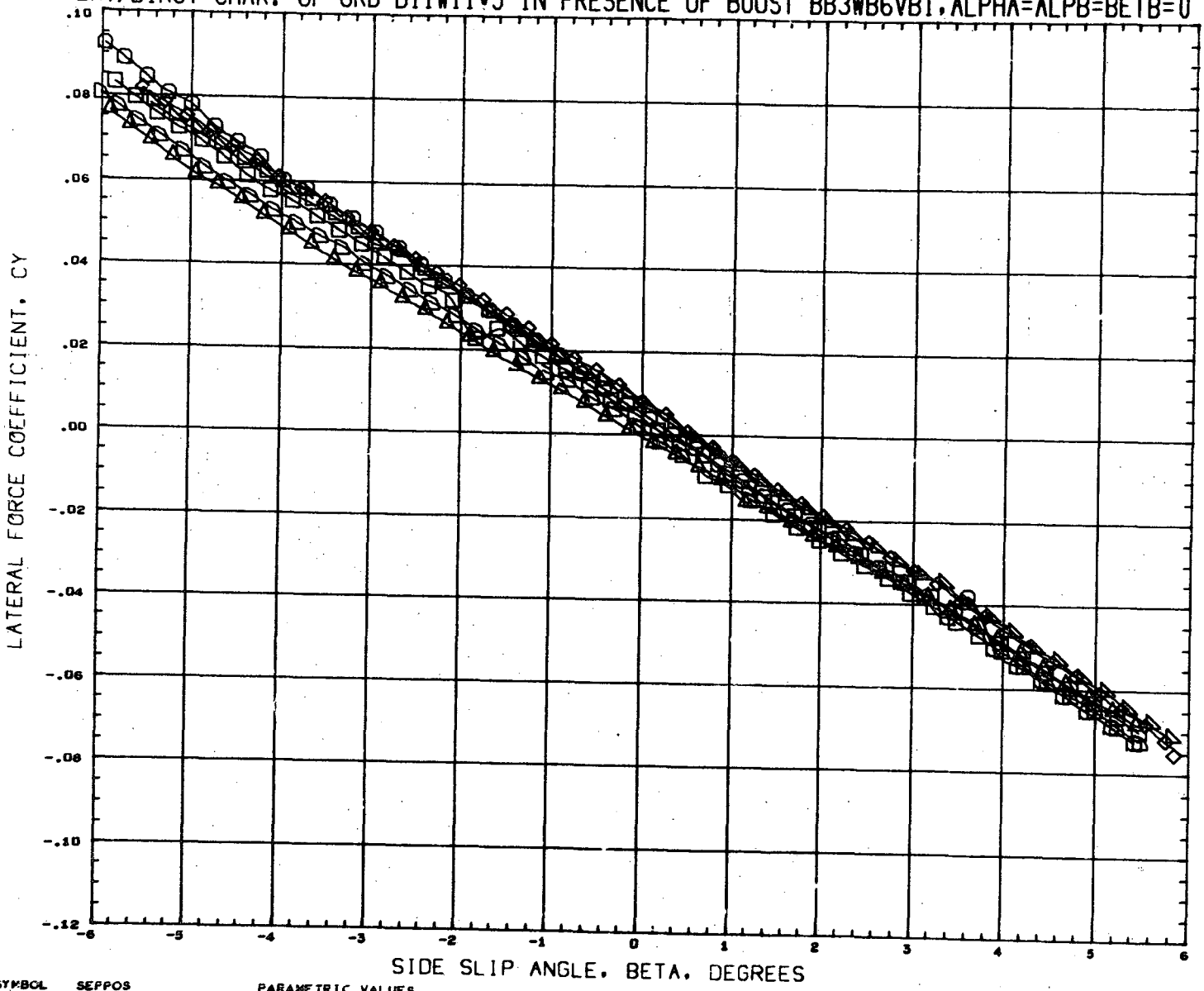
ALPHA	0.044	MACH	0.890
ALPB	0.189	BETB	- 0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0

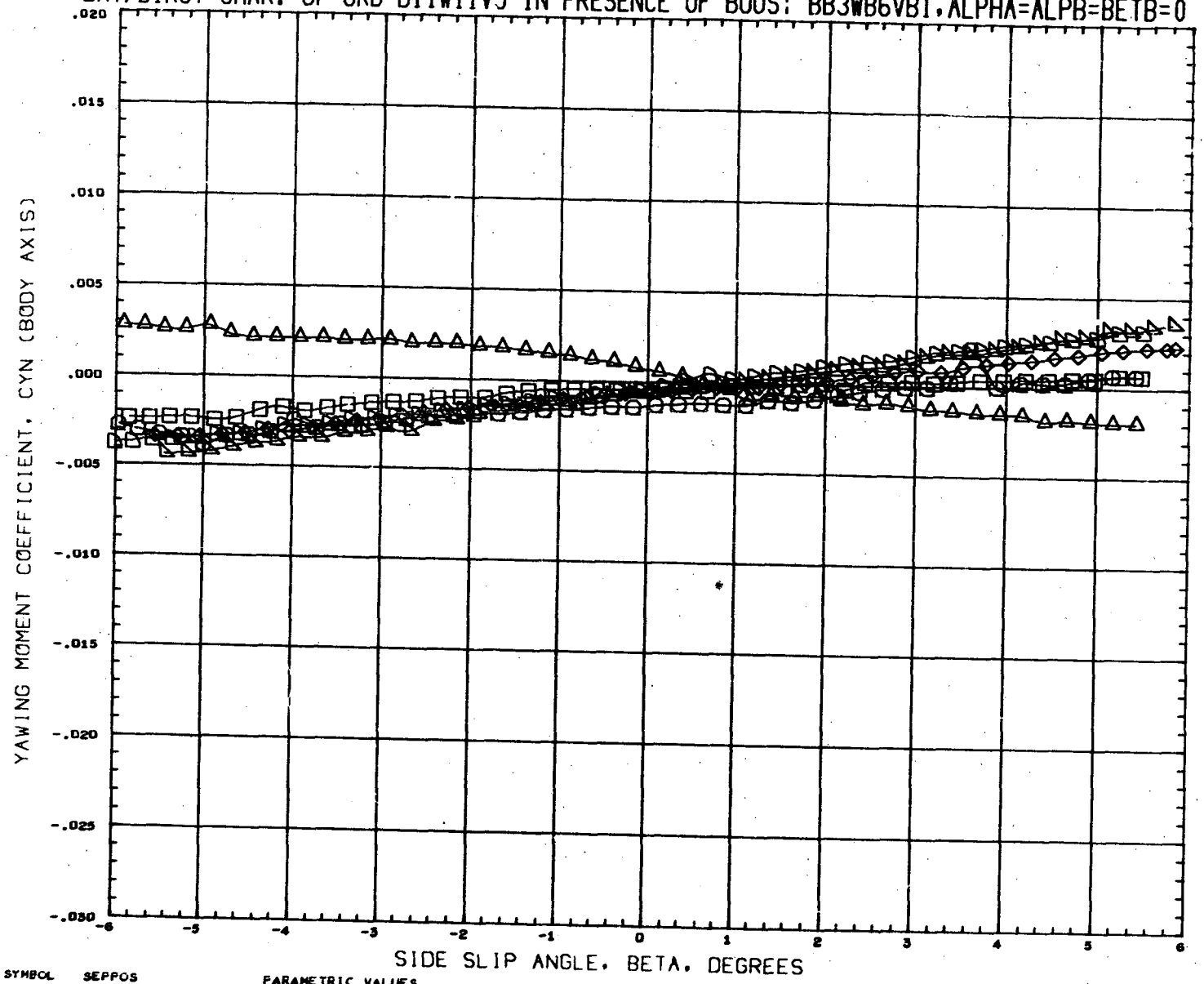


SYMBOL	SEPPOS		PARAMETRIC VALUES		
	0.003	ALPHA	0.104	MACH	1.100
	0.004	ALPB	0.192	BETB	- 0.010
	0.006				
	0.008				
	0.009				
	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
△	0.003
□	0.004
◇	0.006
△	0.008
□	0.009
○	0.012

PARAMETRIC VALUES

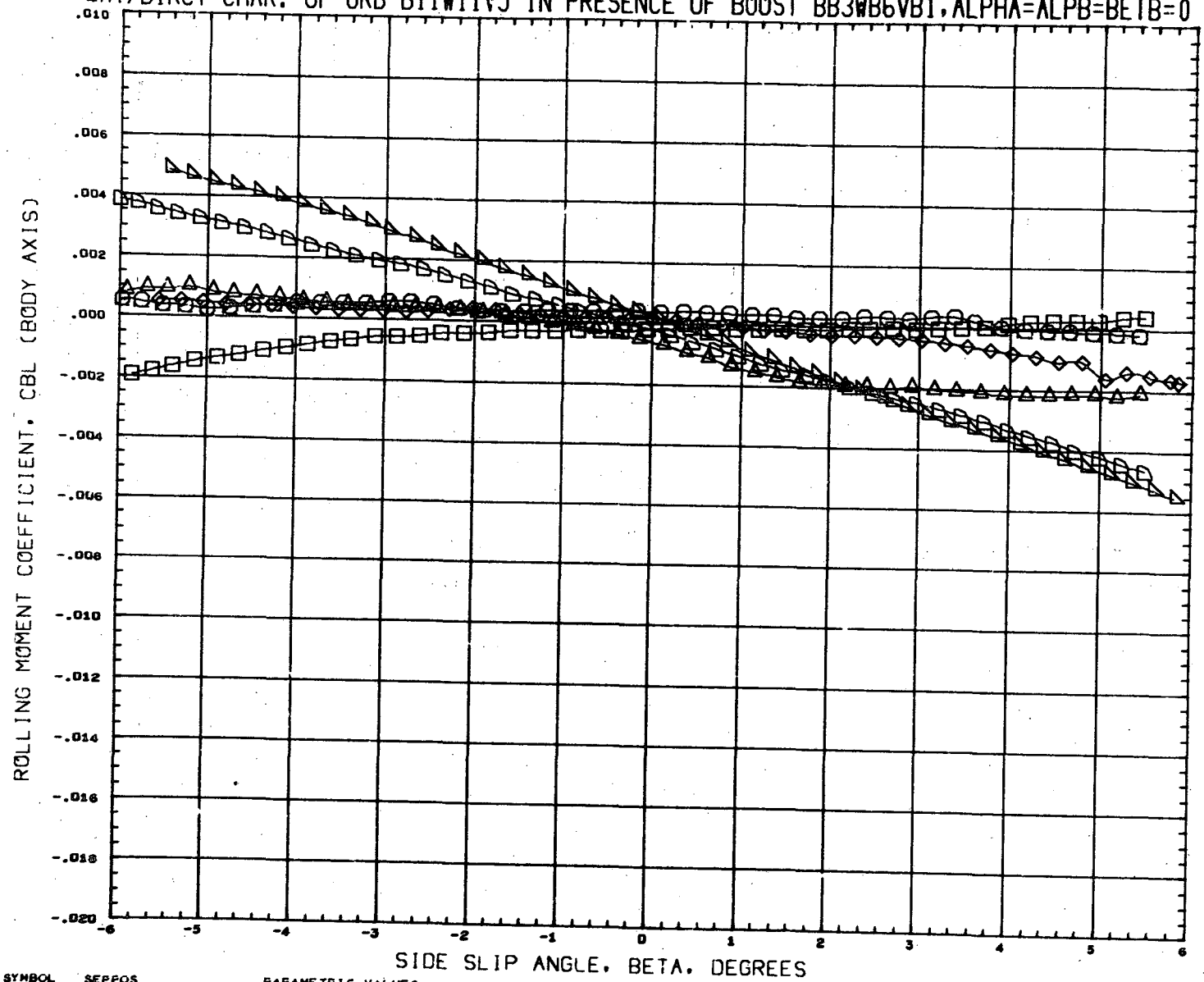
ALPHA	0.104	MACH		1.100
ALPB	0.192	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
▽	0.004
□	0.006
◇	0.008
△	0.009
○	0.012

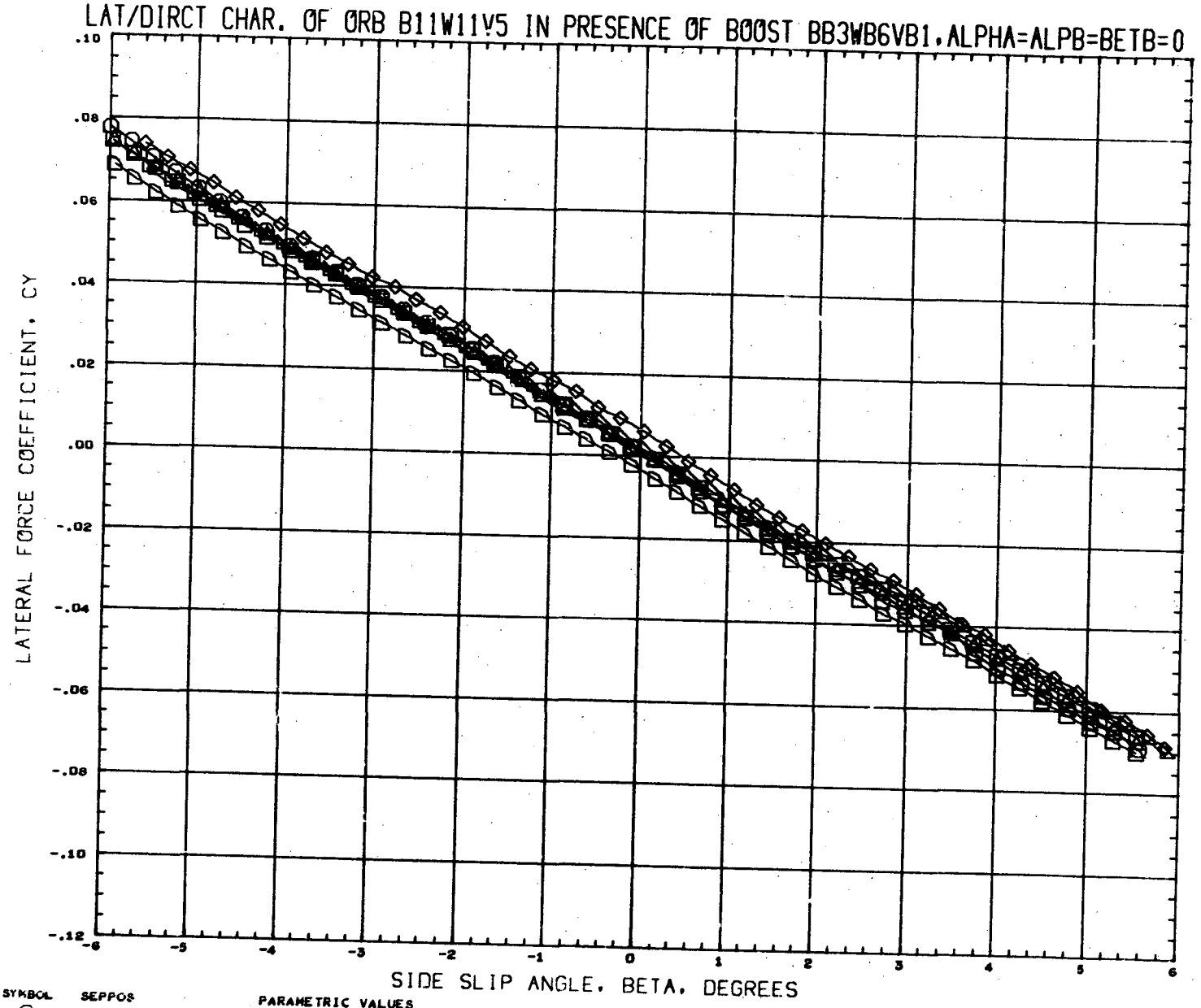
PARAMETRIC VALUES

ALPHA	0.104	MACH		1.100
ALPB	0.192	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
D	0.003
☐	0.004
◇	0.006
△	0.008
○	0.009
	0.012

PARAMETRIC VALUES

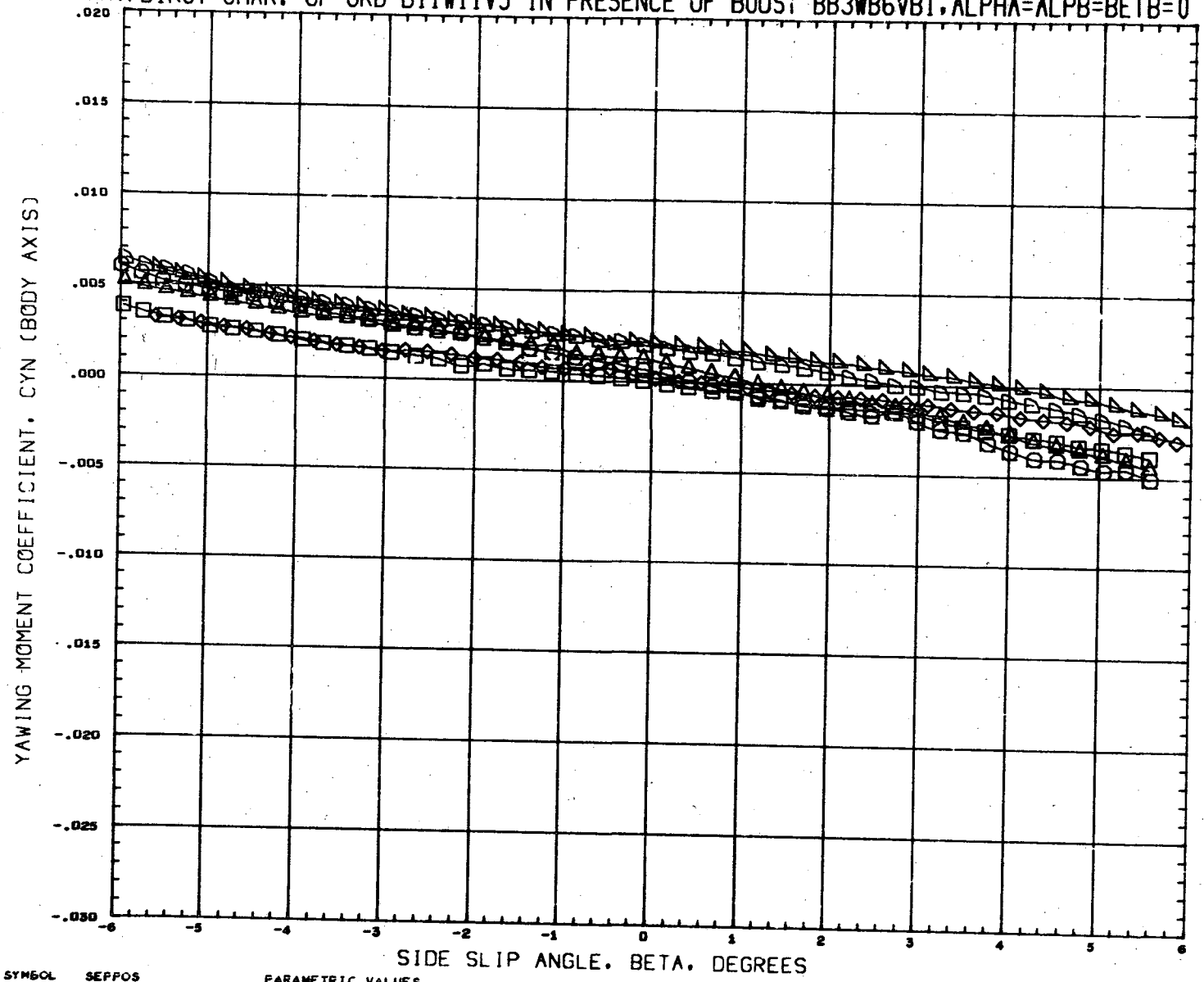
ALPHA	0.202	MACH	1.370
ALPB	0.189	BETB	- 0.014

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.2750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
○	0.003
△	0.004
◇	0.006
□	0.008
▷	0.009
⬠	0.012

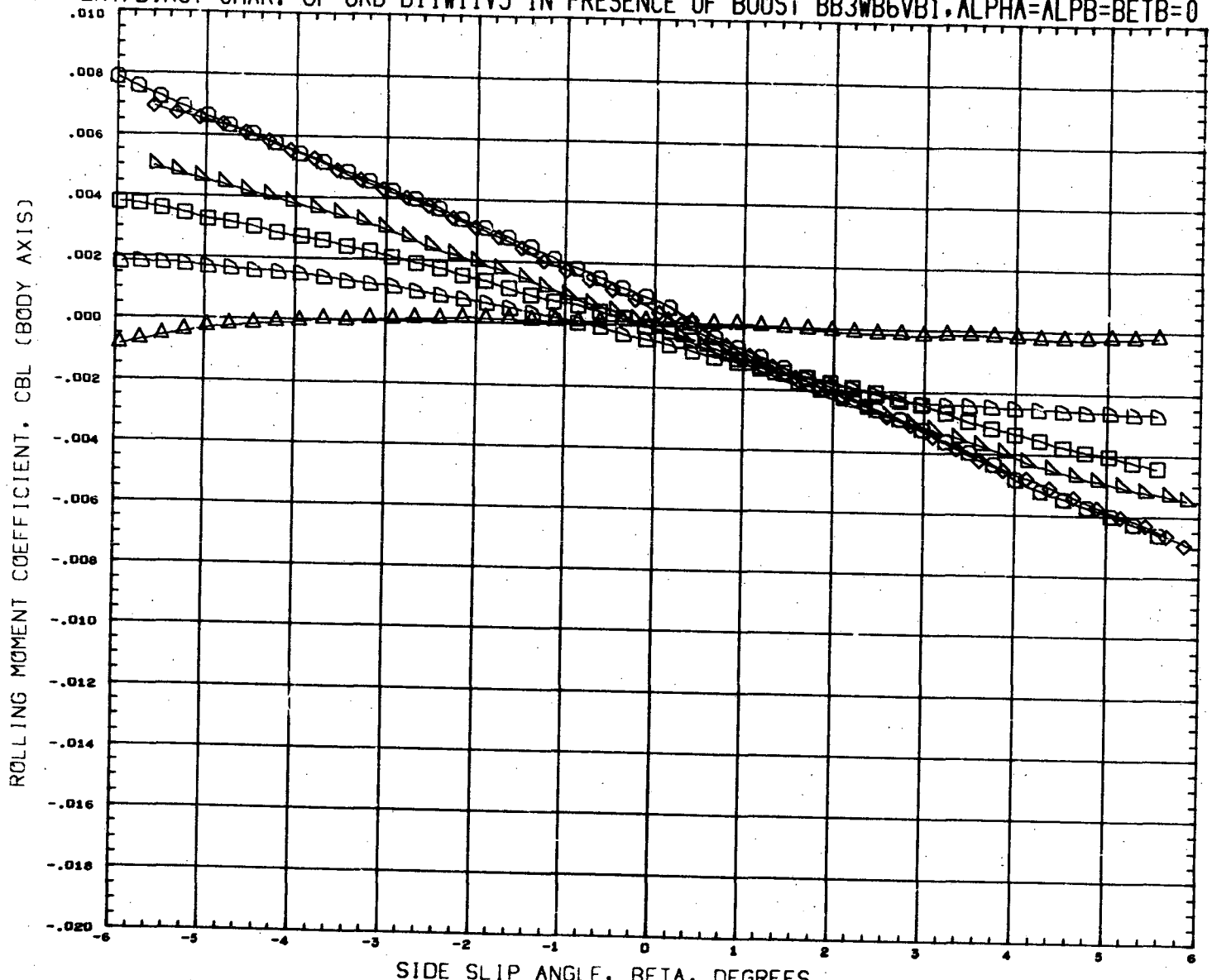
PARAMETRIC VALUES

ALPHA	0.202	MACH	1.370
ALPB	0.189	BETB	- 0.014
REFERENCE FILE	.0000		

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

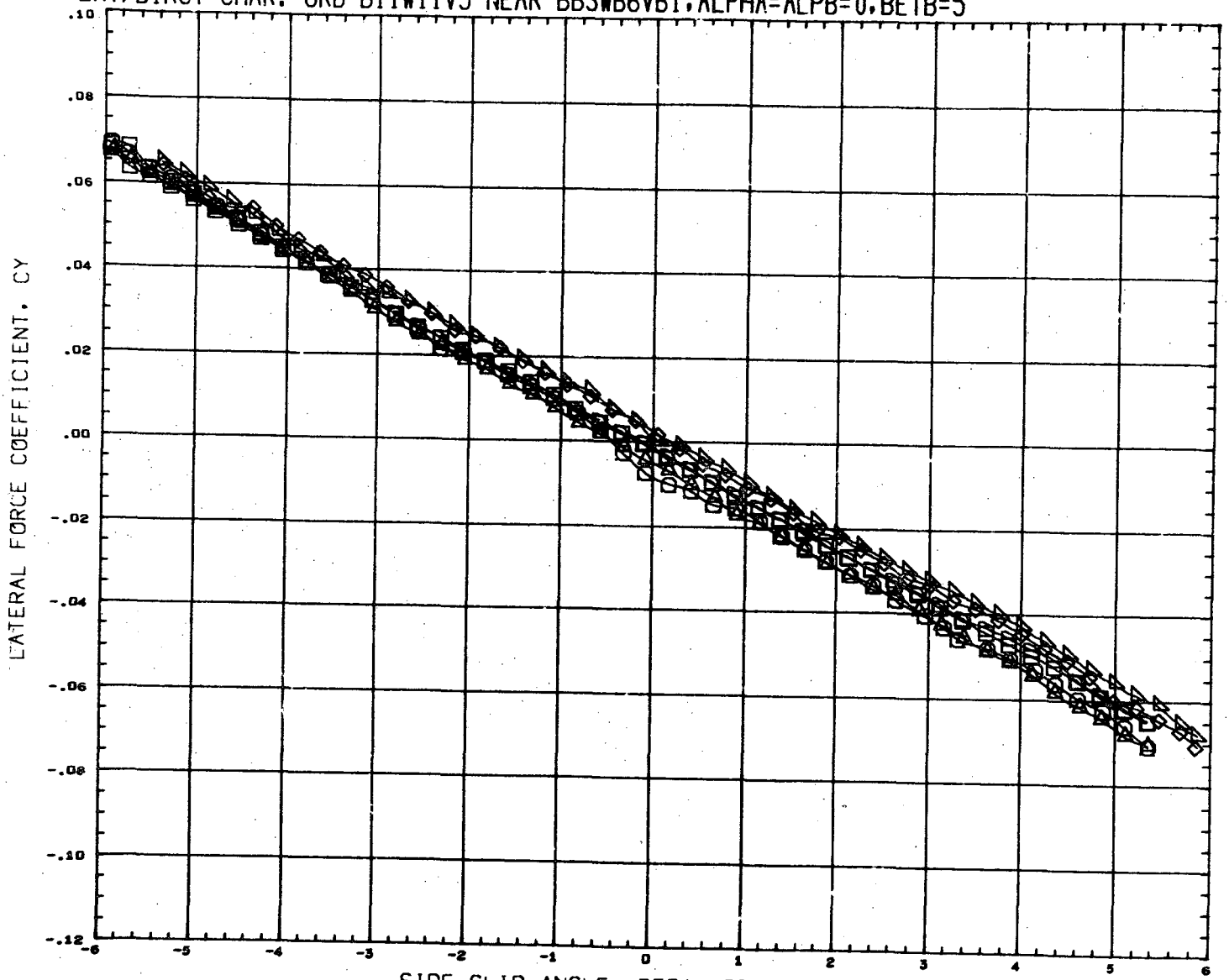
LAT/DIRCT CHAR. OF ORB B11W11V5 IN PRESENCE OF BOOST BB3WB6VB1, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.003	ALPHA	0.202	MACH	1.370
□	0.004	ALPB	0.189	BETB	- 0.014
◇	0.006				
△	0.008				
D	0.009				
⬠	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION		
SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8720	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ØRB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
○	0.003
△	0.004
□	0.006
◇	0.008
▽	0.009
▷	0.012

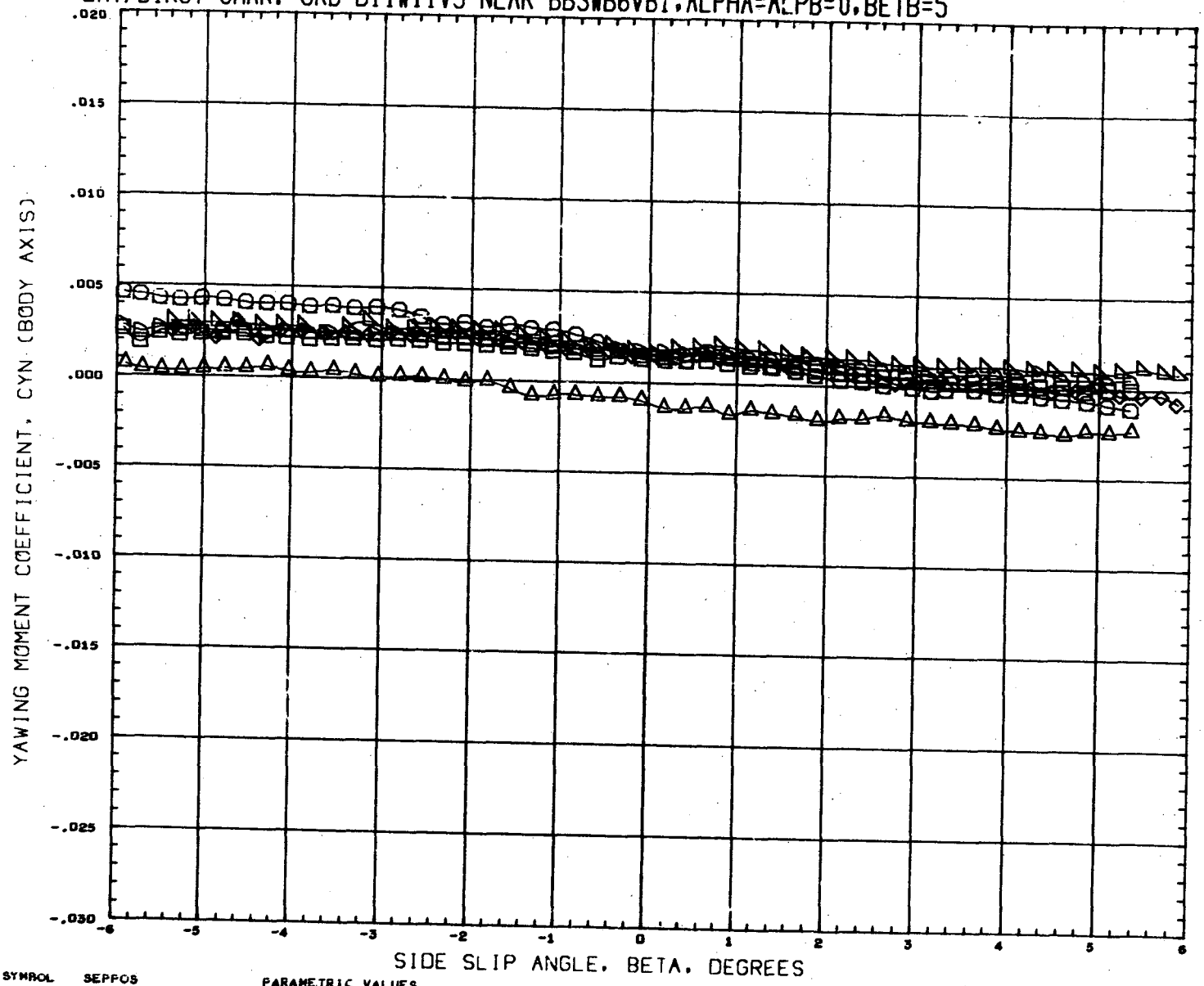
PARAMETPIC VALUES

ALPHA	0.037	MACH	0.590
ALPB	0.140	BETB	5.100
REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ORB B11W11V5 NEAR BB3WB6VB1,ALPHA=ALPB=0,BETB=5



SYMBOL	SEPPOS
△	0.003
○	0.004
▽	0.006
□	0.008
◇	0.009
⬠	0.012

PARAMETRIC VALUES

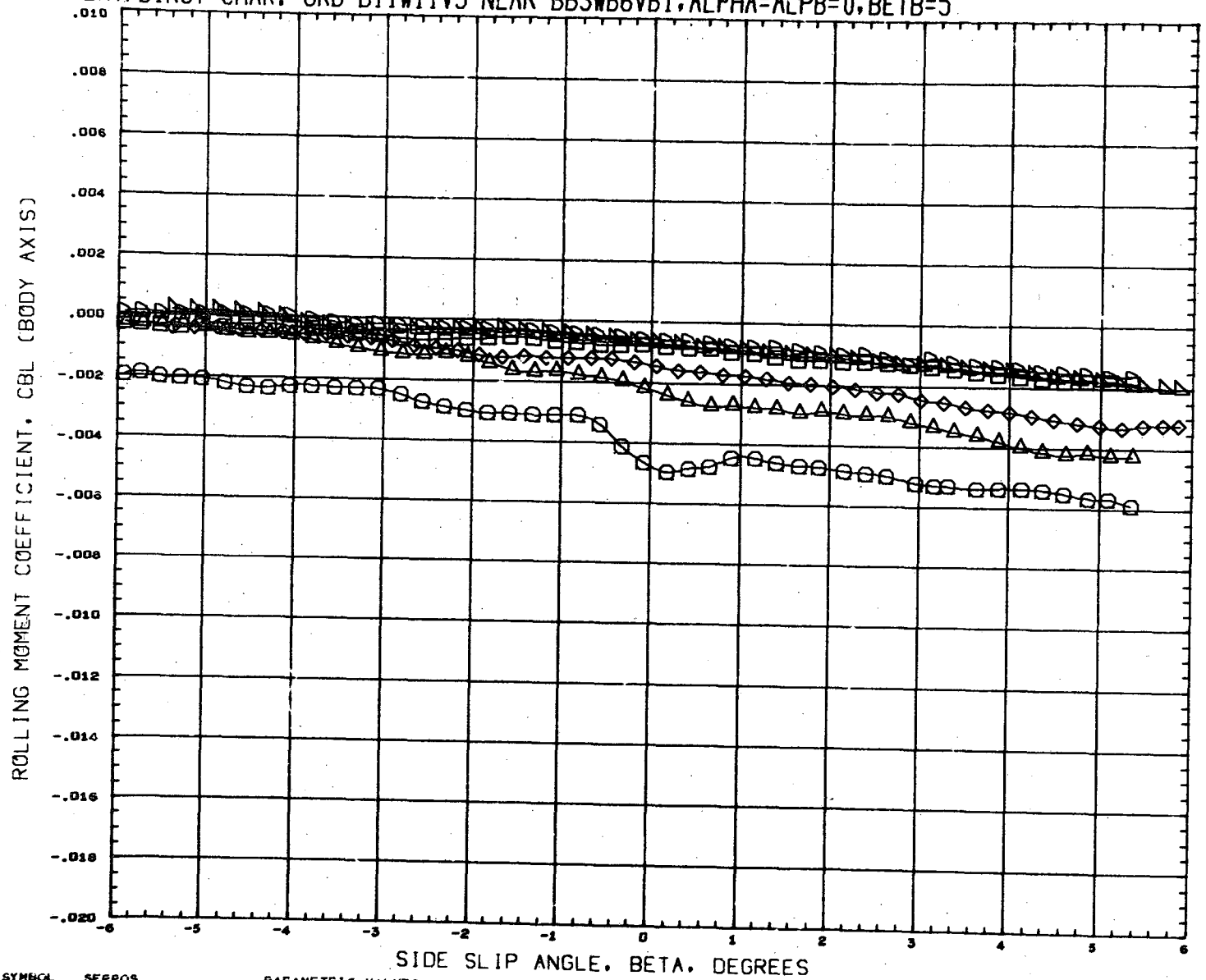
ALPHA	0.037	MACH	0.590
ALPB	0.140	BETB	5.100

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ØRB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5

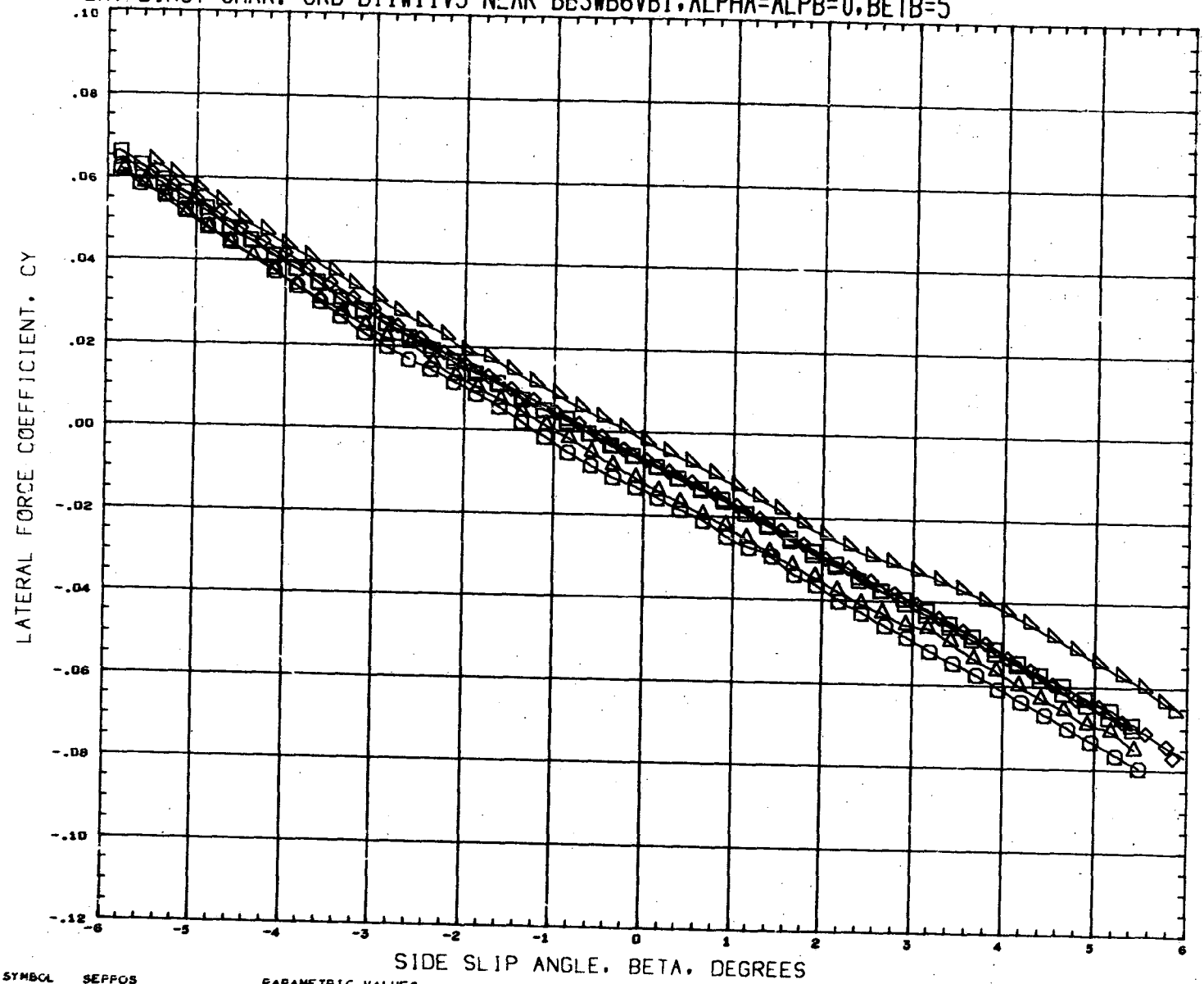


SYMBOL	SEPPOS		PARAMETRIC VALUES		
○	0.003	ALPHA	0.037	MACH	0.590
△	0.004	ALPB	0.140	BETB	5.100
◇	0.006				
□	0.008				
▽	0.009				
⬠	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8740	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0068	

LAT/DIRCT CHAR. ORB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
▷	0.003
▽	0.004
□	0.006
◇	0.008
△	0.009
○	0.012

PARAMETRIC VALUES

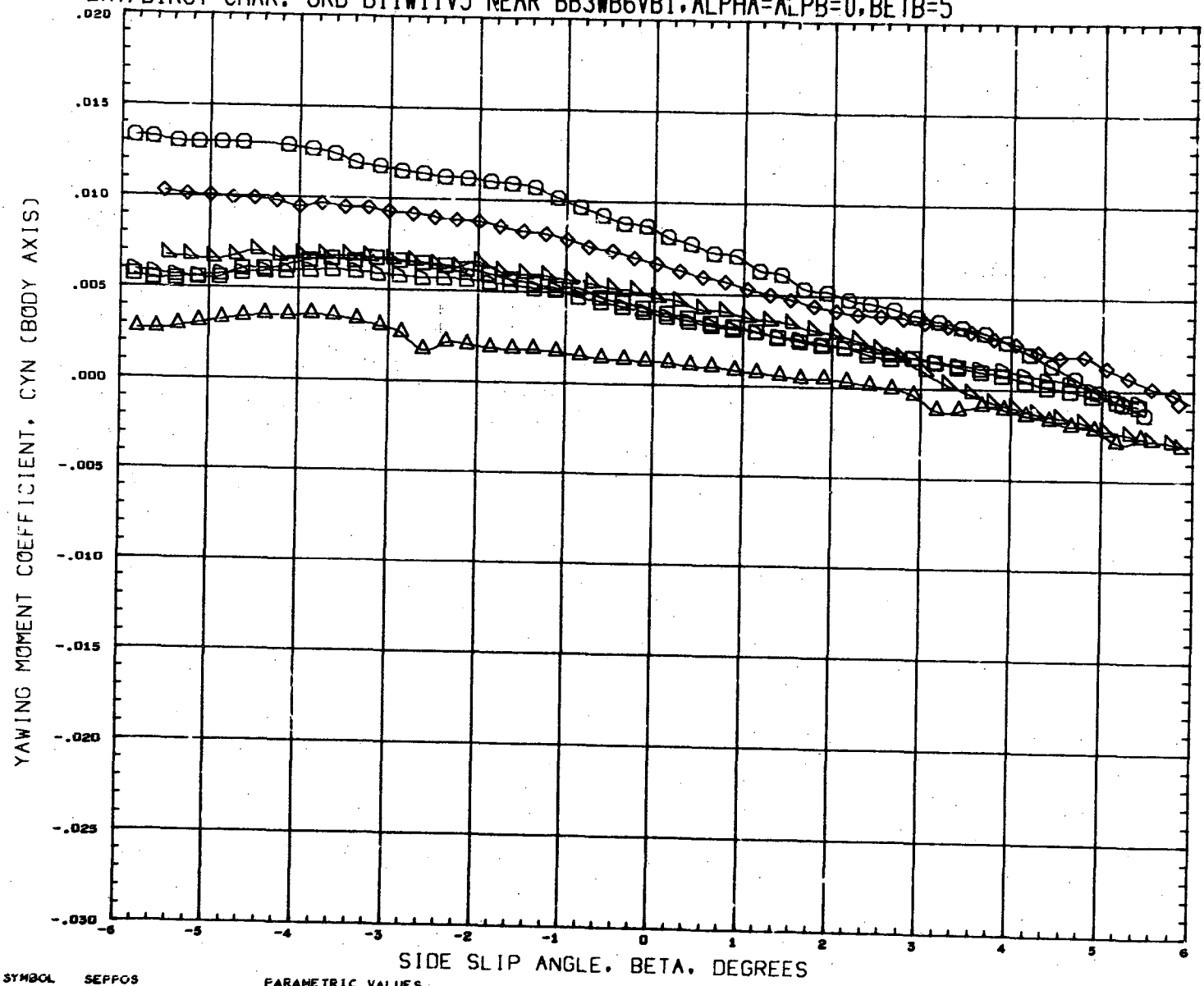
ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ORB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
○	0.003
□	0.004
◇	0.006
△	0.008
▽	0.009
⬡	0.012

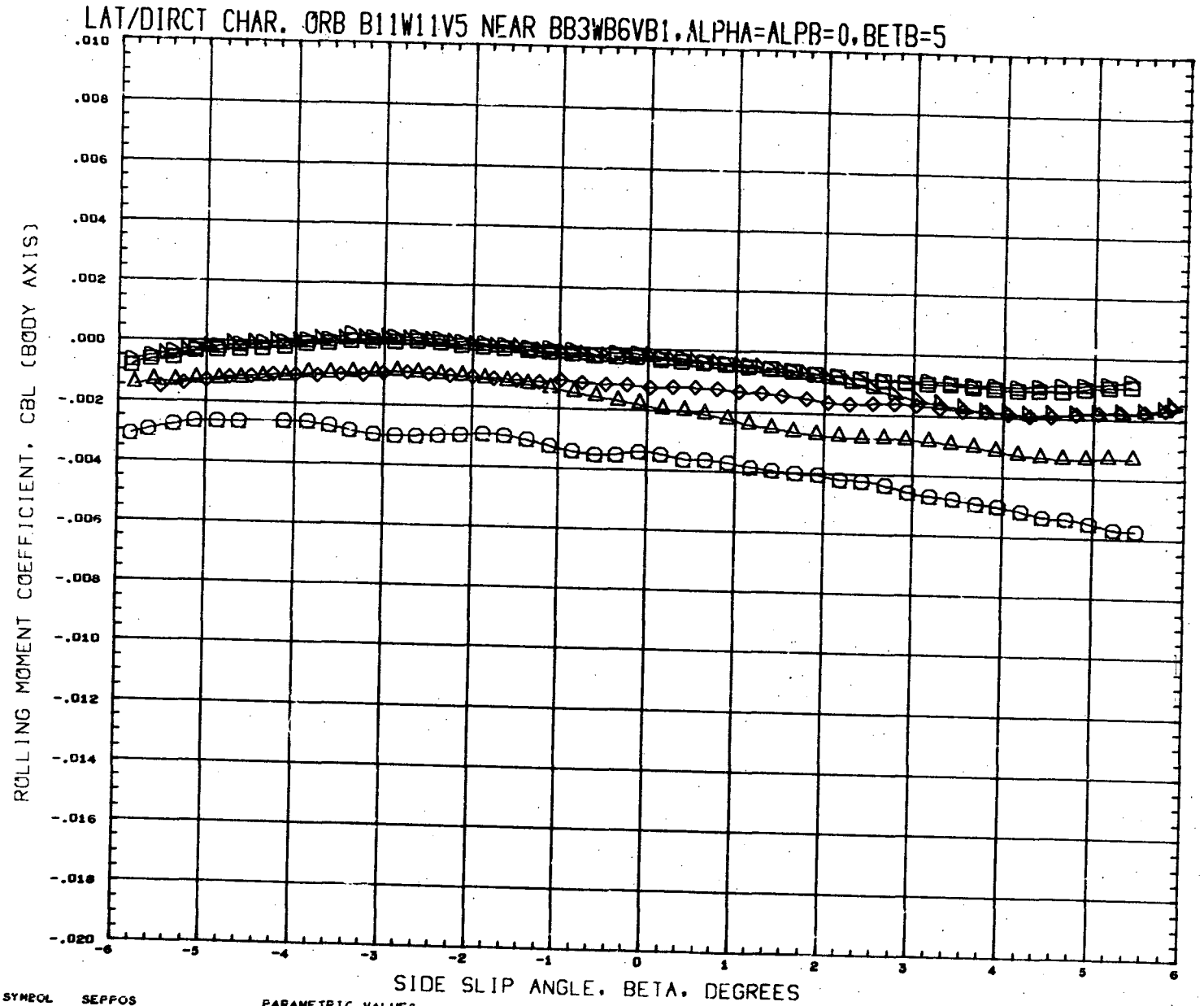
PARAMETRIC VALUES

ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPFOS
○	0.003
△	0.004
◇	0.006
□	0.008
▷	0.009
D	0.012

PARAMETRIC VALUES

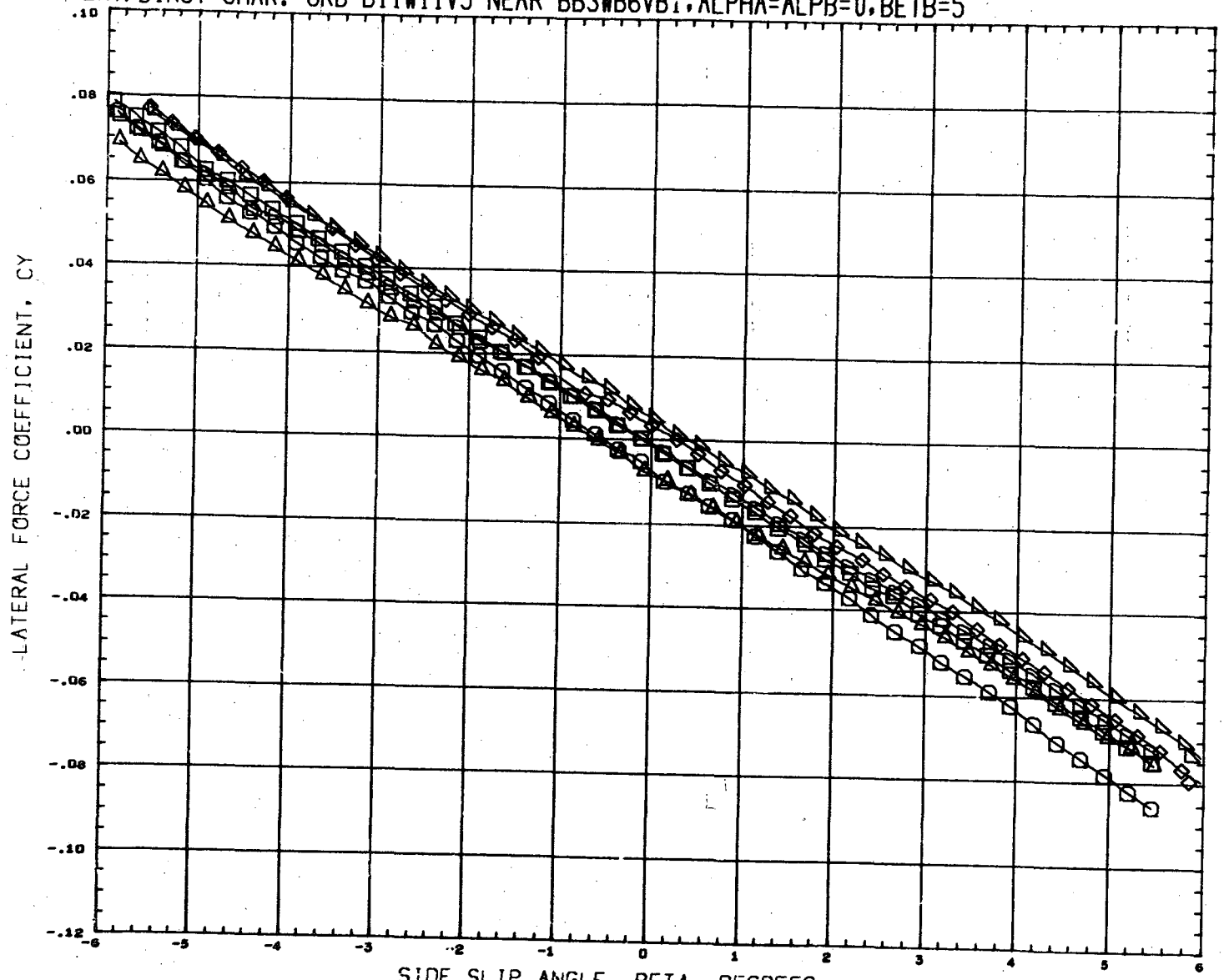
ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ØRB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5



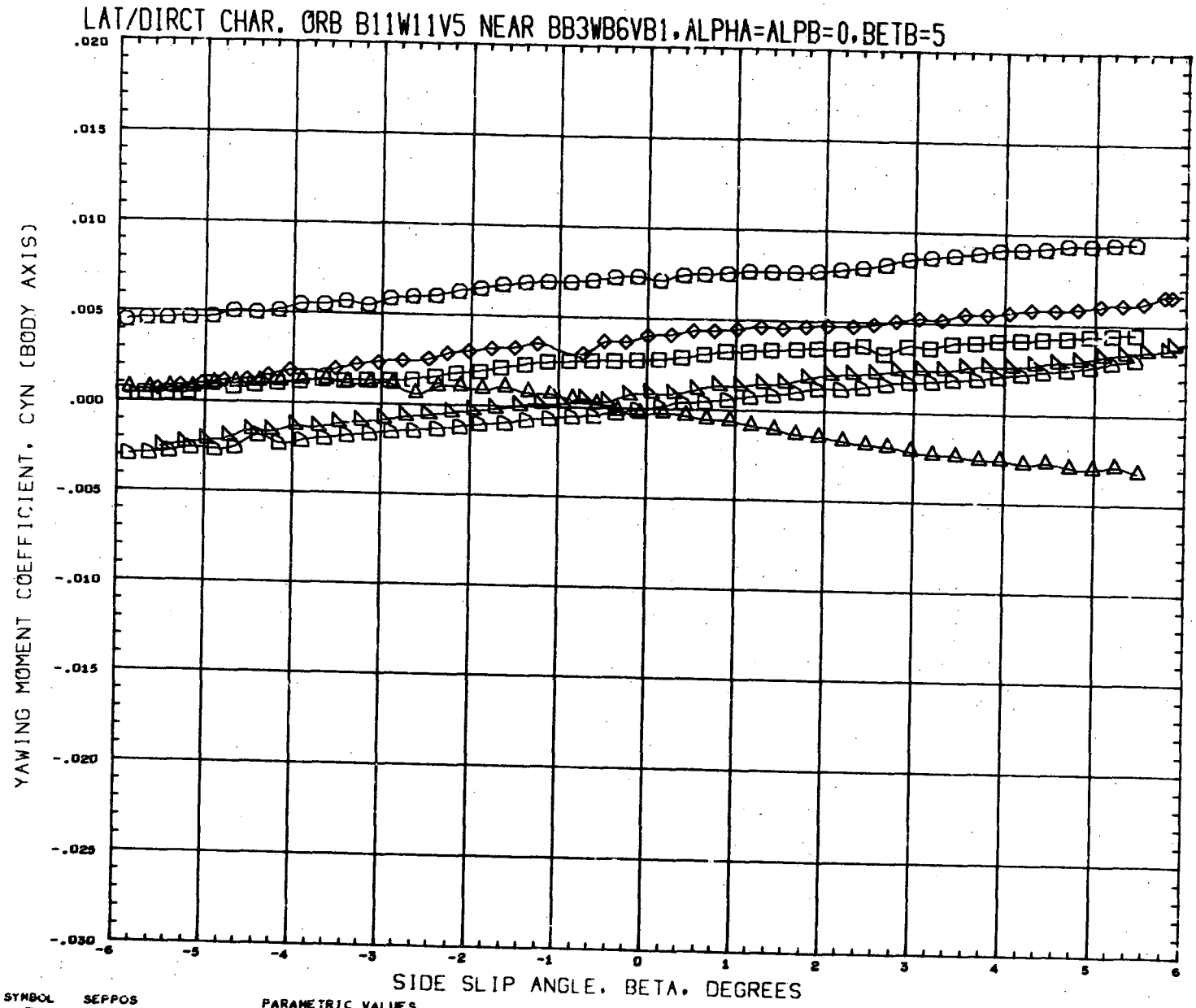
SYMBOL	SEPPOS
□	0.003
△	0.004
◇	0.006
⬠	0.008
⬡	0.009
○	0.012

PARAMETRIC VALUES

ALFHA	0.108	MACH		1.100
ALPB	0.187	BETB		5.220
REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



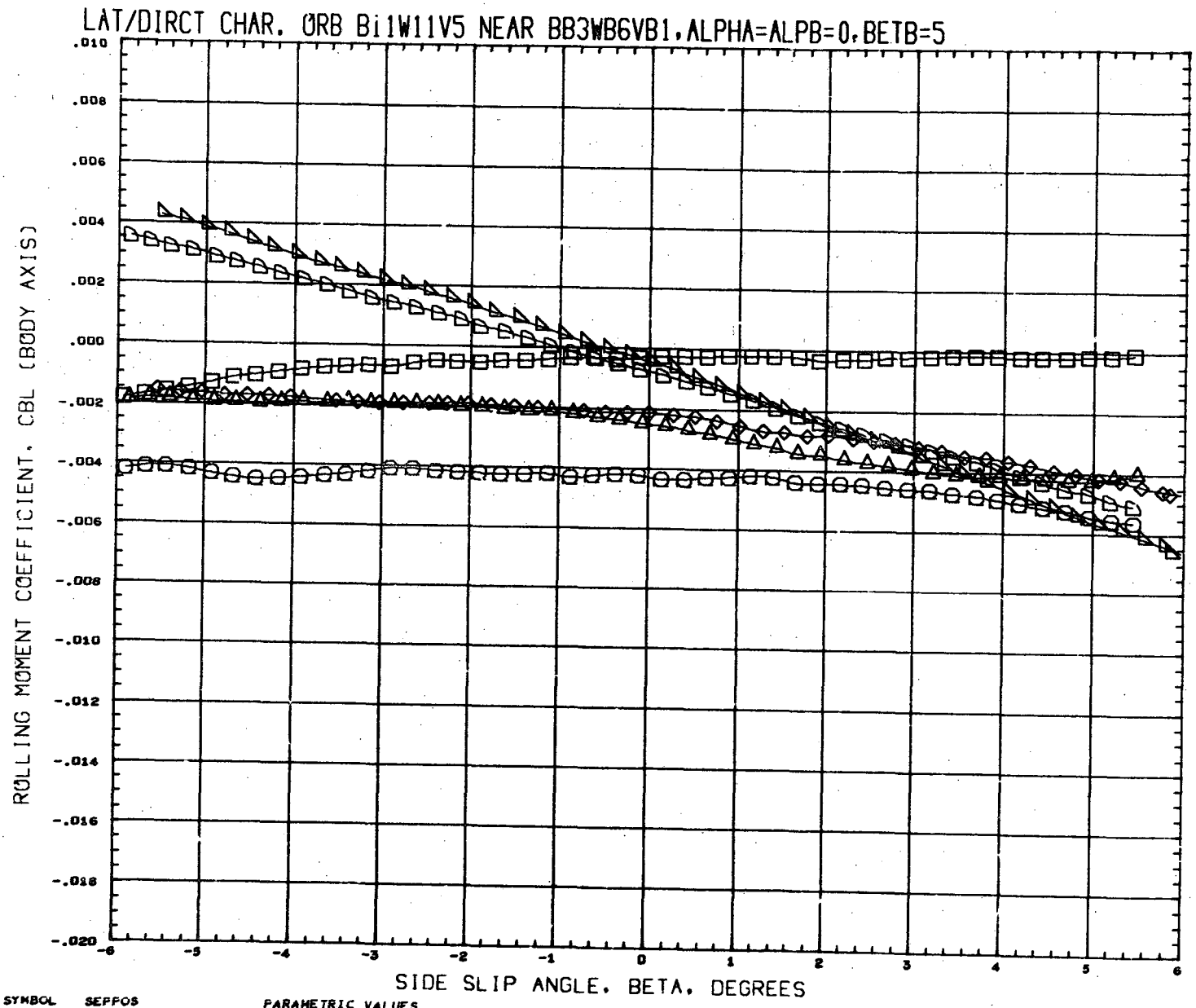
SYMBOL	SEPPOS
D	0.003
△	0.004
◇	0.006
□	0.008
▱	0.009
○	0.012

PARAMETRIC VALUES

ALPHA	0.108	MACH	1.100
ALPB	0.187	PETB	5.220
REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

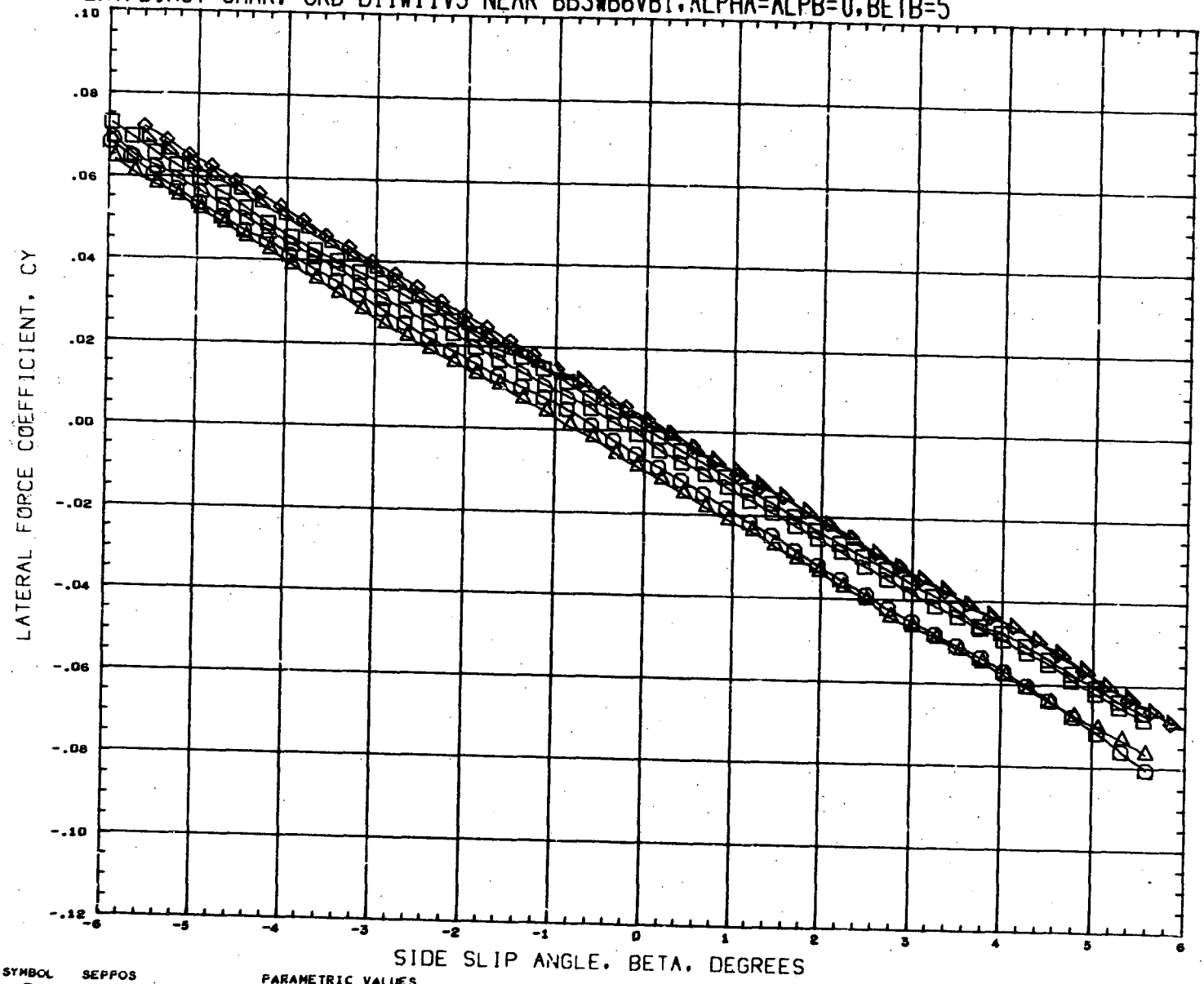


SYMBOL	SEPPOS		PARAMETRIC VALUES		
	0.003	ALFHA	0.108	MACH	1.100
	0.004	ALPB	0.107	BETB	5.220
	0.006				
	0.008				
	0.009				
	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.2750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. ORB B11W11V5 NEAR BB3WB6VB1, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
D	0.003
☐	0.004
◇	0.006
△	0.008
○	0.009
D	0.012

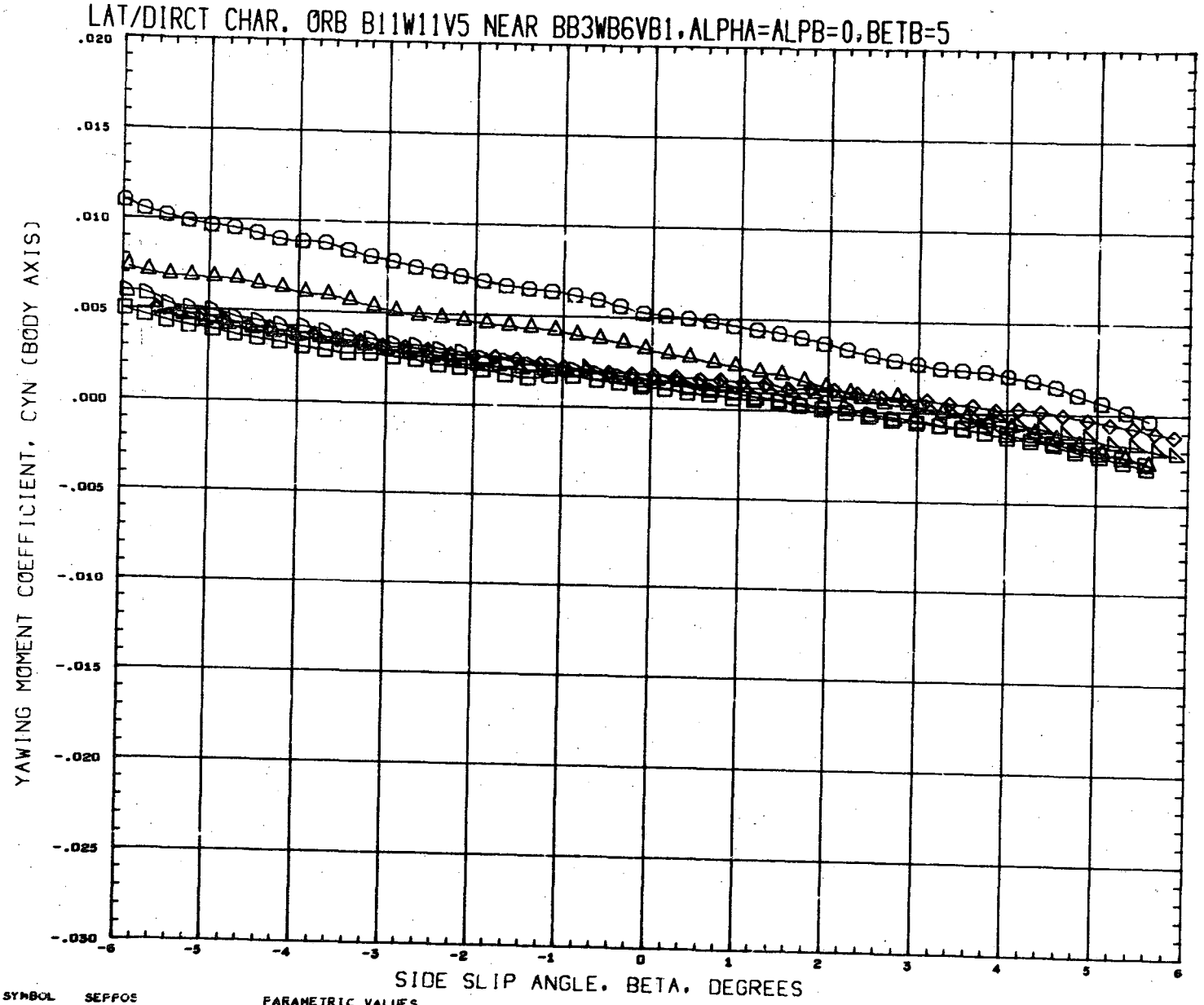
PARAMETRIC VALUES

ALPHA	0.247	MACH	1.370
ALPB	0.196	BETB	5.304

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3860	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
□	0.003
◇	0.004
△	0.006
○	0.008
	0.009
	0.012

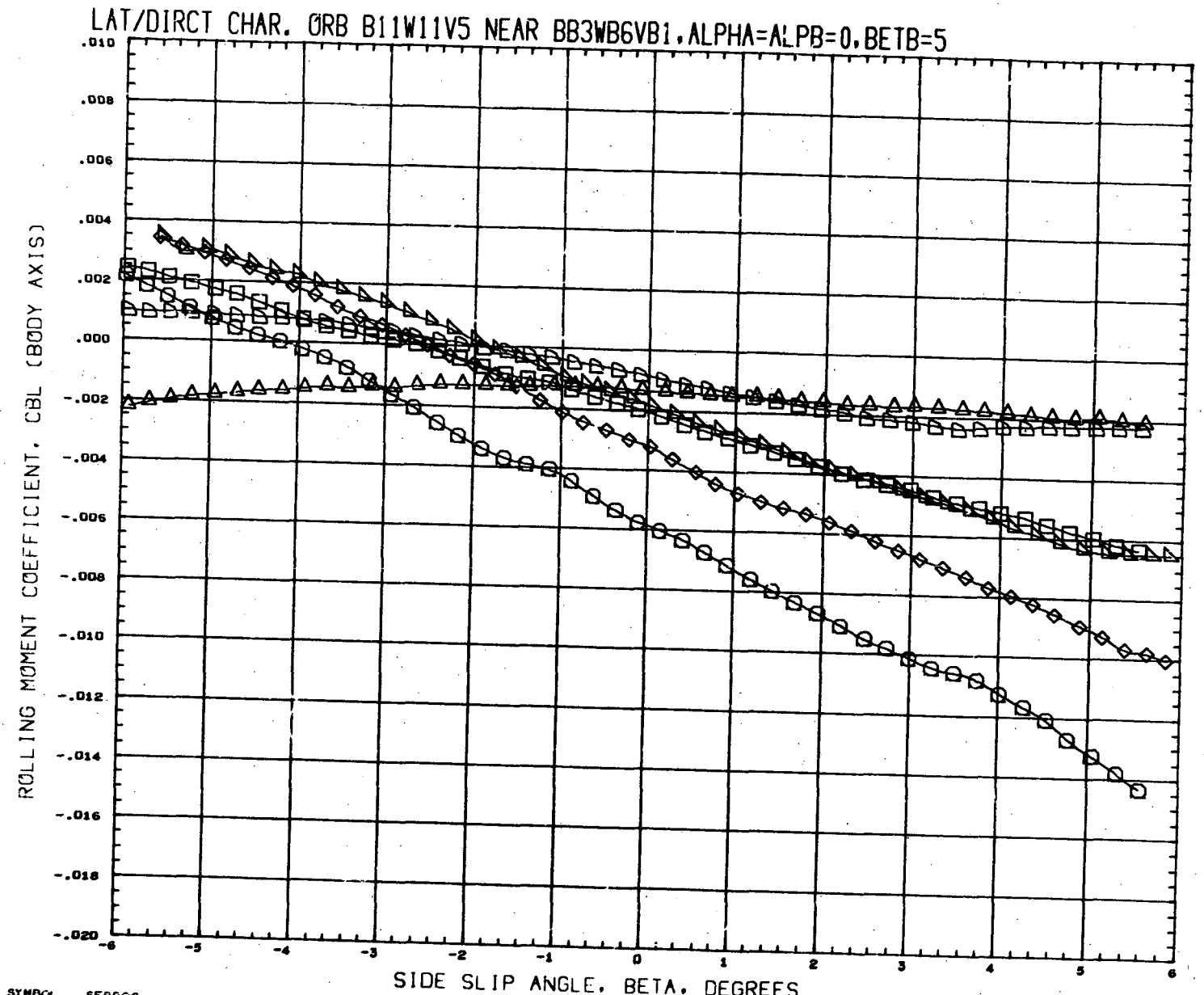
PARAMETRIC VALUES

ALPHA	0.247	MACH	1.370
ALPB	0.196	BETB	5.304

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.6750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	



SYMBOL	SEPPOS
D	0.003
□	0.004
◇	0.006
△	0.008
○	0.009
	0.012

PARAMETRIC VALUES

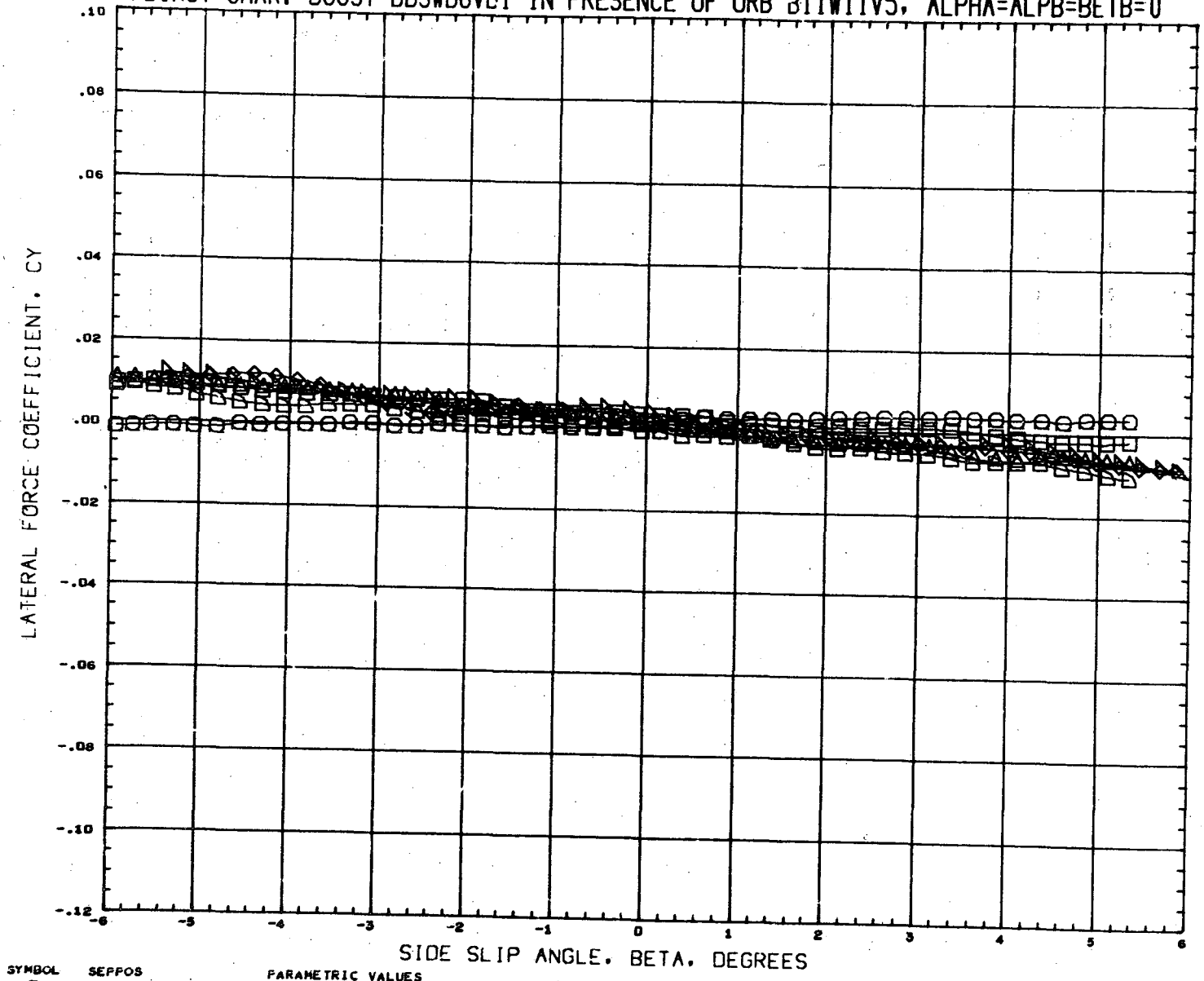
ALPHA	0.247	MACH	1.370
ALFB	0.196	BETB	5.304

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	74.7500	SQ IN
LREF	9.8820	IN
BREF	8.8750	IN
XMRP	9.3880	IN
YMRP	0.0000	IN
ZMRP	1.4600	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0

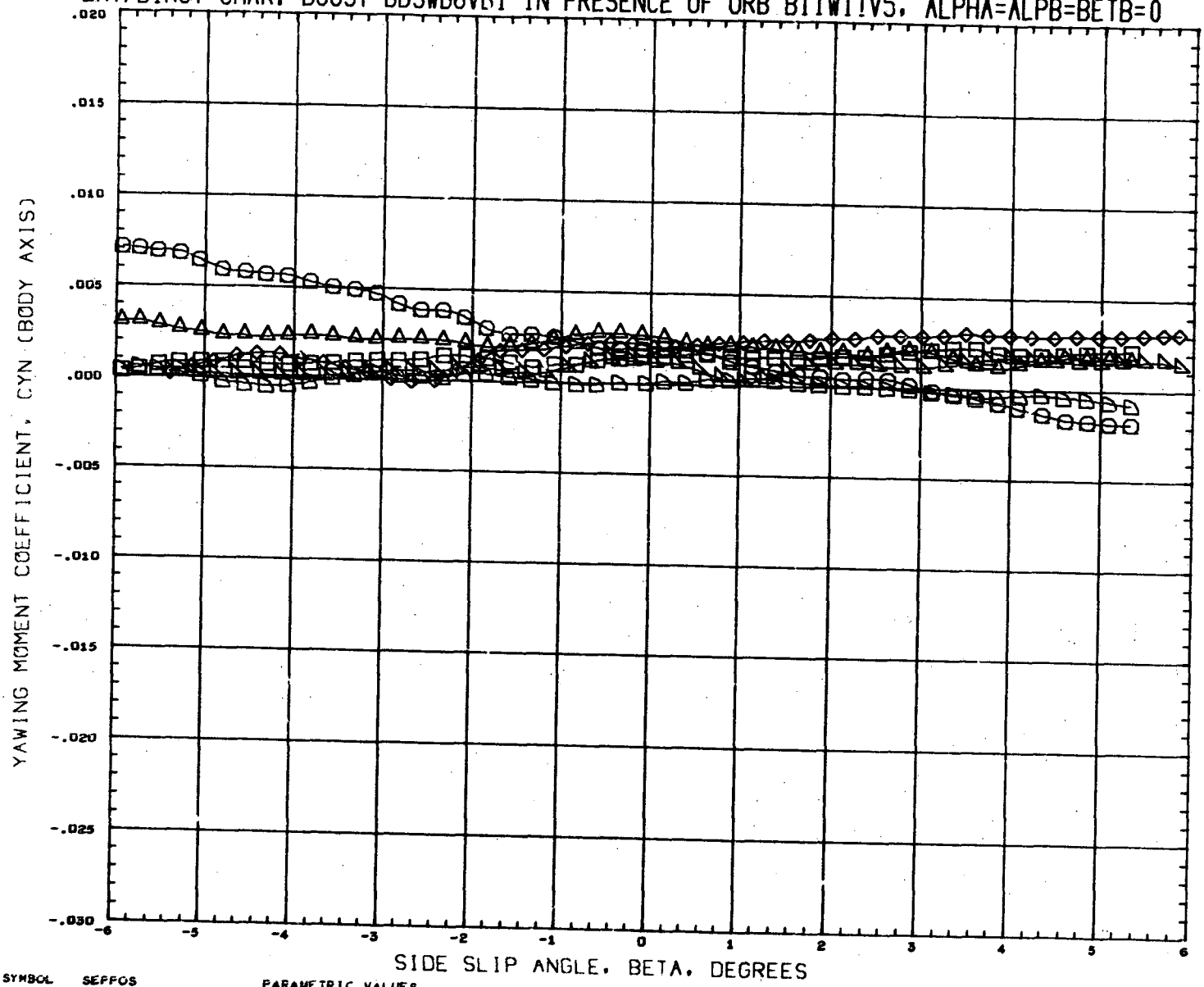


SYMBOL	SEPPOS		PARAMETRIC VALUES		
○	0.003	ALPHA	0.047	MACH	0.600
□	0.004	ALPB	0.139	BETB	- 0.008
◇	0.006				
△	0.008				
▽	0.009				
⬠	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEFFOS
D	0.003
□	0.004
◇	0.006
△	0.008
	0.009
	0.012

PARAMETRIC VALUES

ALPHA	0.047	MACH	0.600
ALPB	0.139	BETB	- 0.008

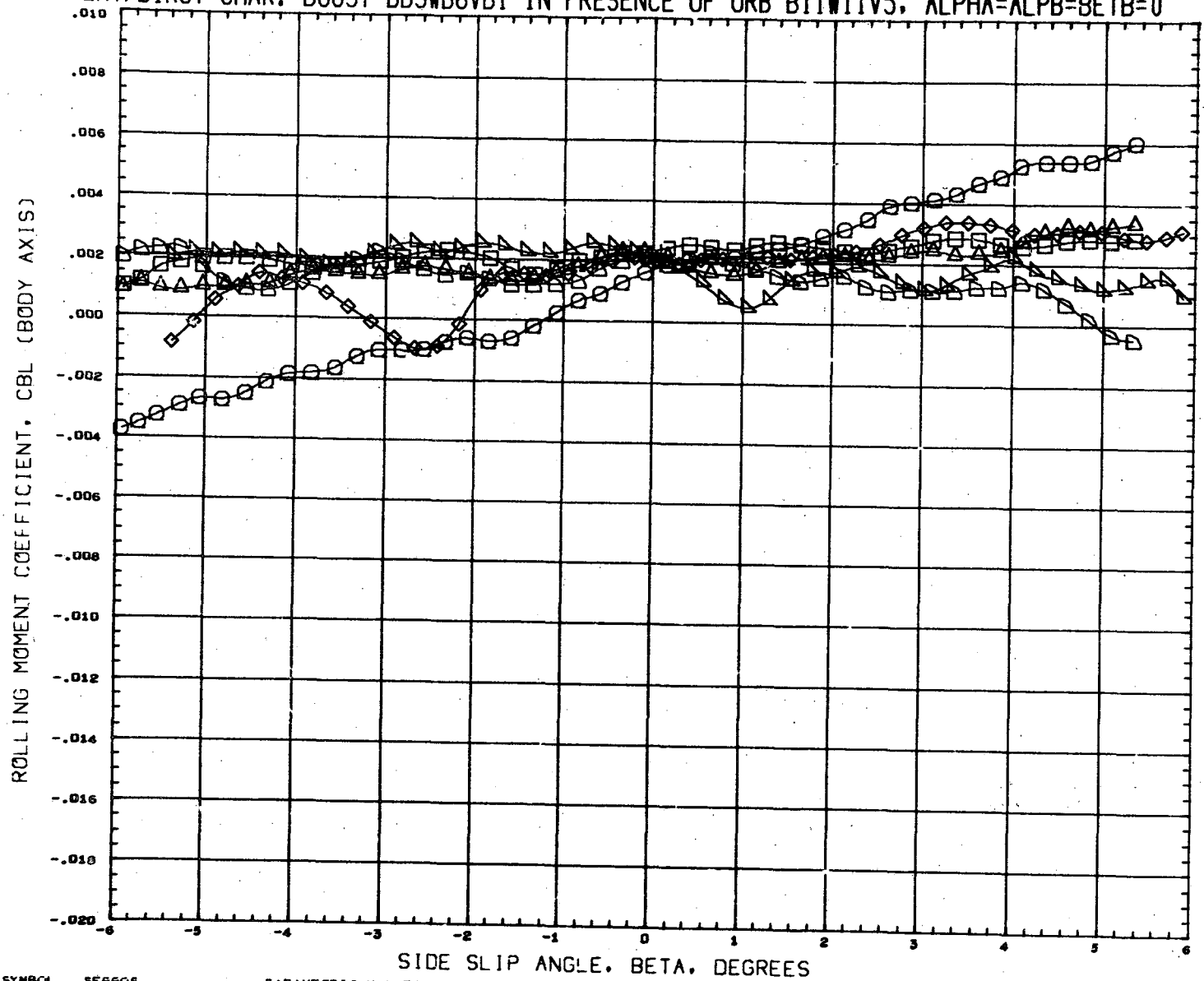
REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6VB1 NEAR B11W11V5 (RCU077) 21 JUN 71

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0

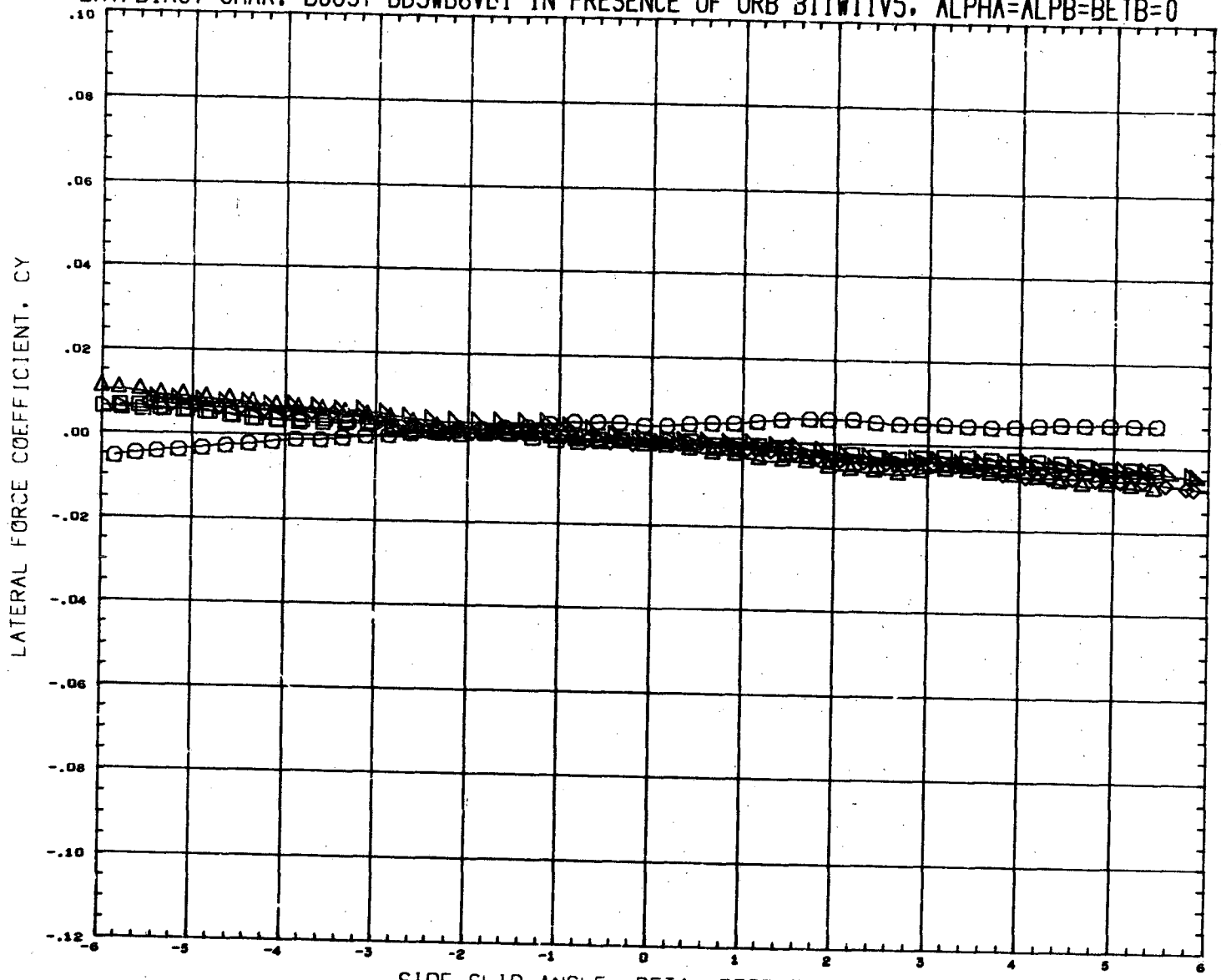


SYMBOL	SEPPOS		PARAMETRIC VALUES			
○	0.003	ALPHA	0.047	MACH		0.600
△	0.004	ALPB	0.139	BETB	-	0.008
◇	0.006					
□	0.008					
▽	0.009					
⬠	0.012	REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8993	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5. ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
○	0.003
△	0.004
▷	0.006
□	0.008
◇	0.009
⌒	0.012

PARAMETRIC VALUES

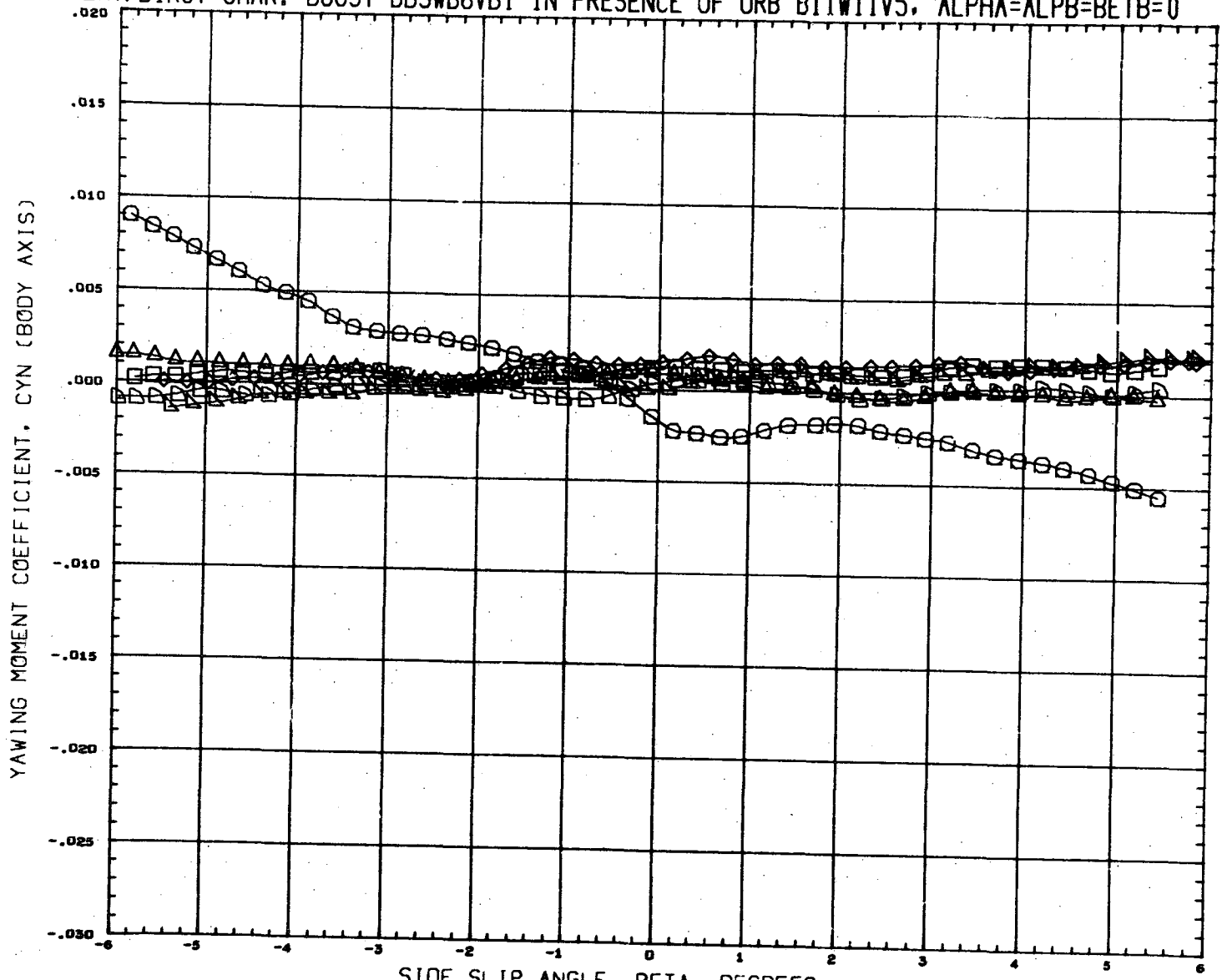
ALPHA	0.044	MACH		0.890
ALPB	0.189	BETB	-	0.006

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	1D6.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
▽	0.003
△	0.004
◇	0.006
□	0.008
⌐	0.009
○	0.012

PARAMETRIC VALUES

ALPHA	0.044	MACH		0.890
ALPB	0.189	BETB	-	0.006

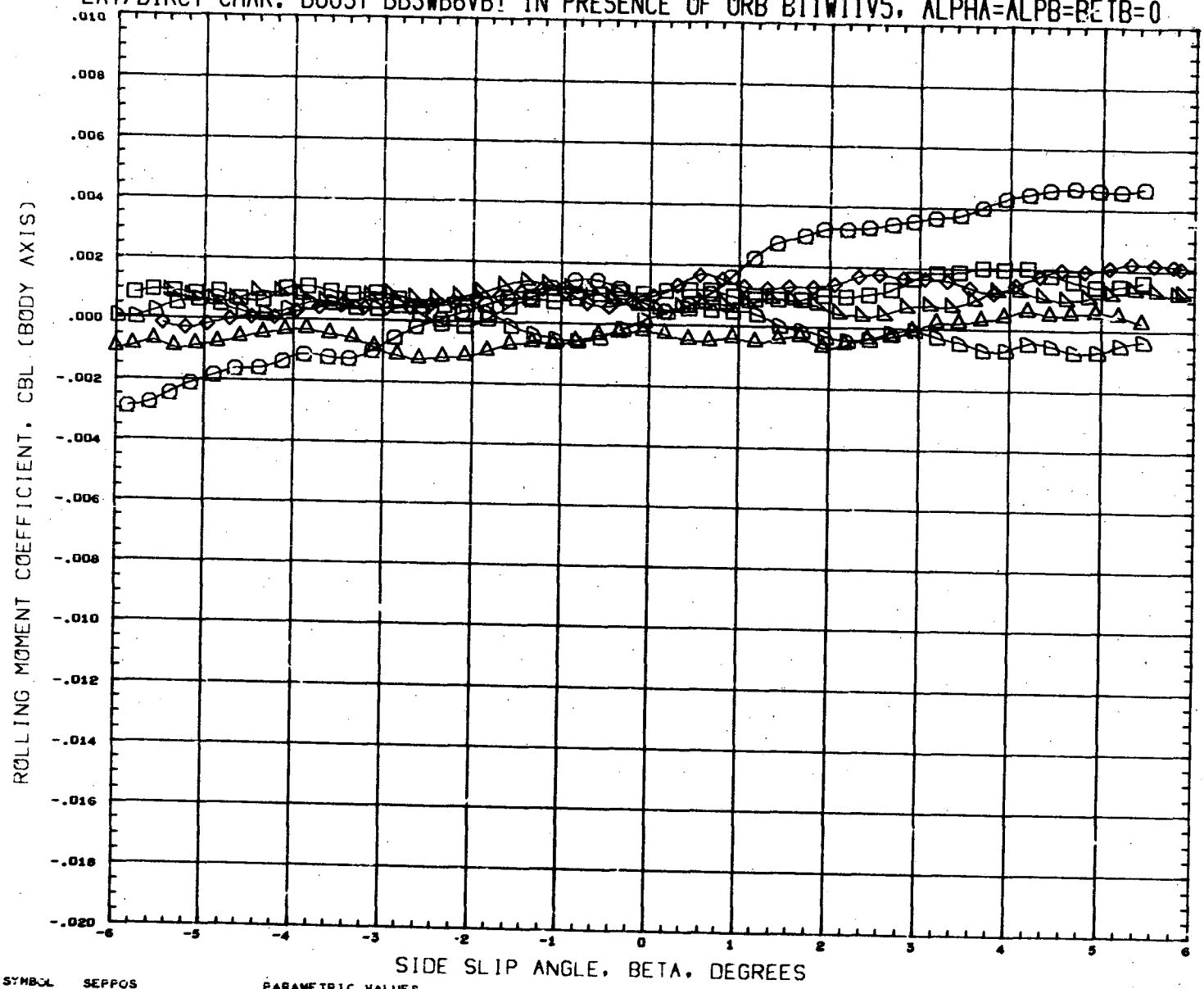
REFERENCE FILE .0000.

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

MSC S-30 BOOSTER BB3WB6VB1 NEAR B11W11V5 (RCU049) 21 JUN 71 PAGE 299

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0

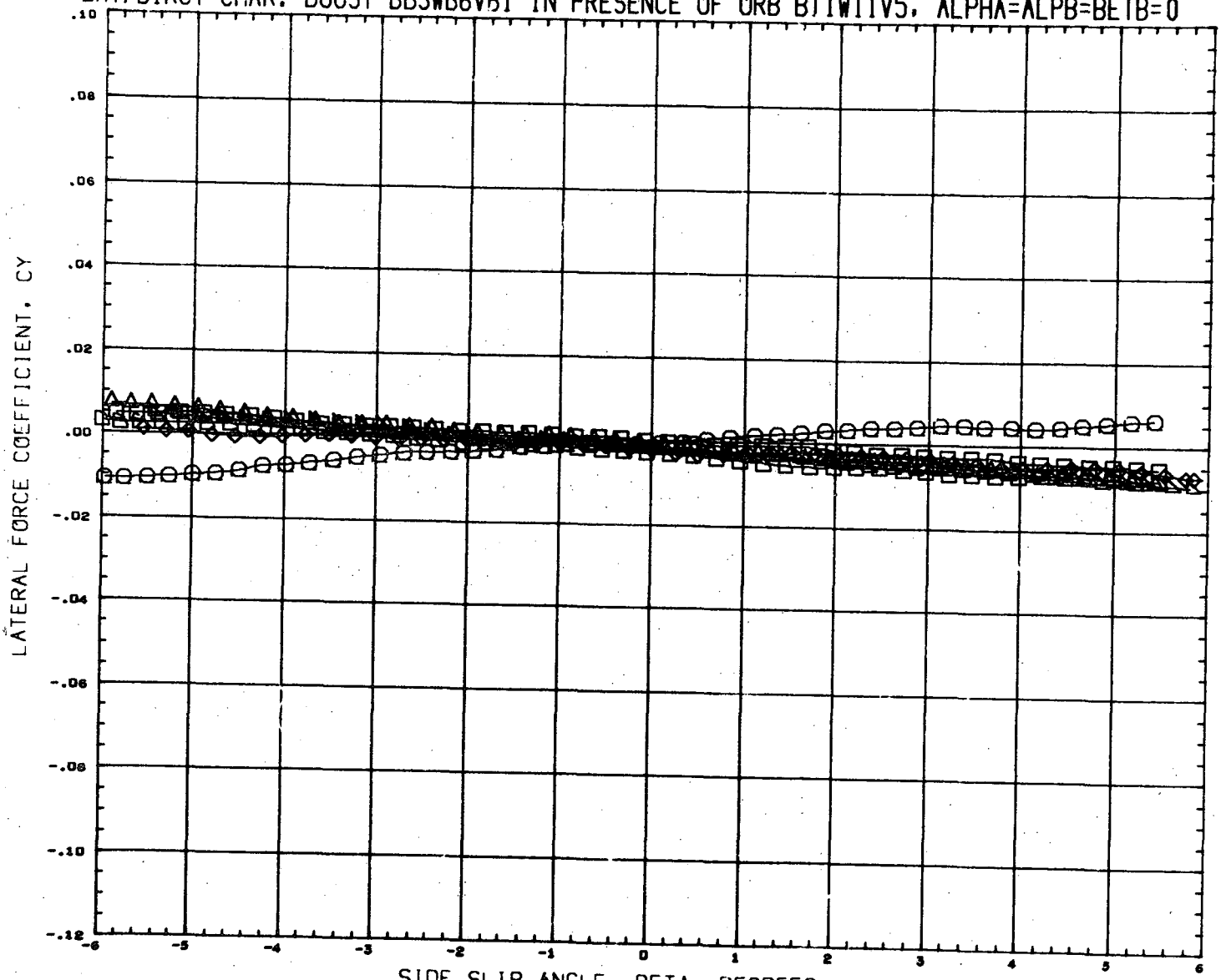


SYMBOL	SEPPOS	PARAMETRIC VALUES				
	0.003	ALPHA	0.044	MACH		0.890
	0.004	ALPB	0.189	BETB	-	0.006
	0.006					
	0.008					
	0.009					
	0.012	REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
☐	0.004
◇	0.006
△	0.008
▽	0.009
○	0.012

PARAMETRIC VALUES

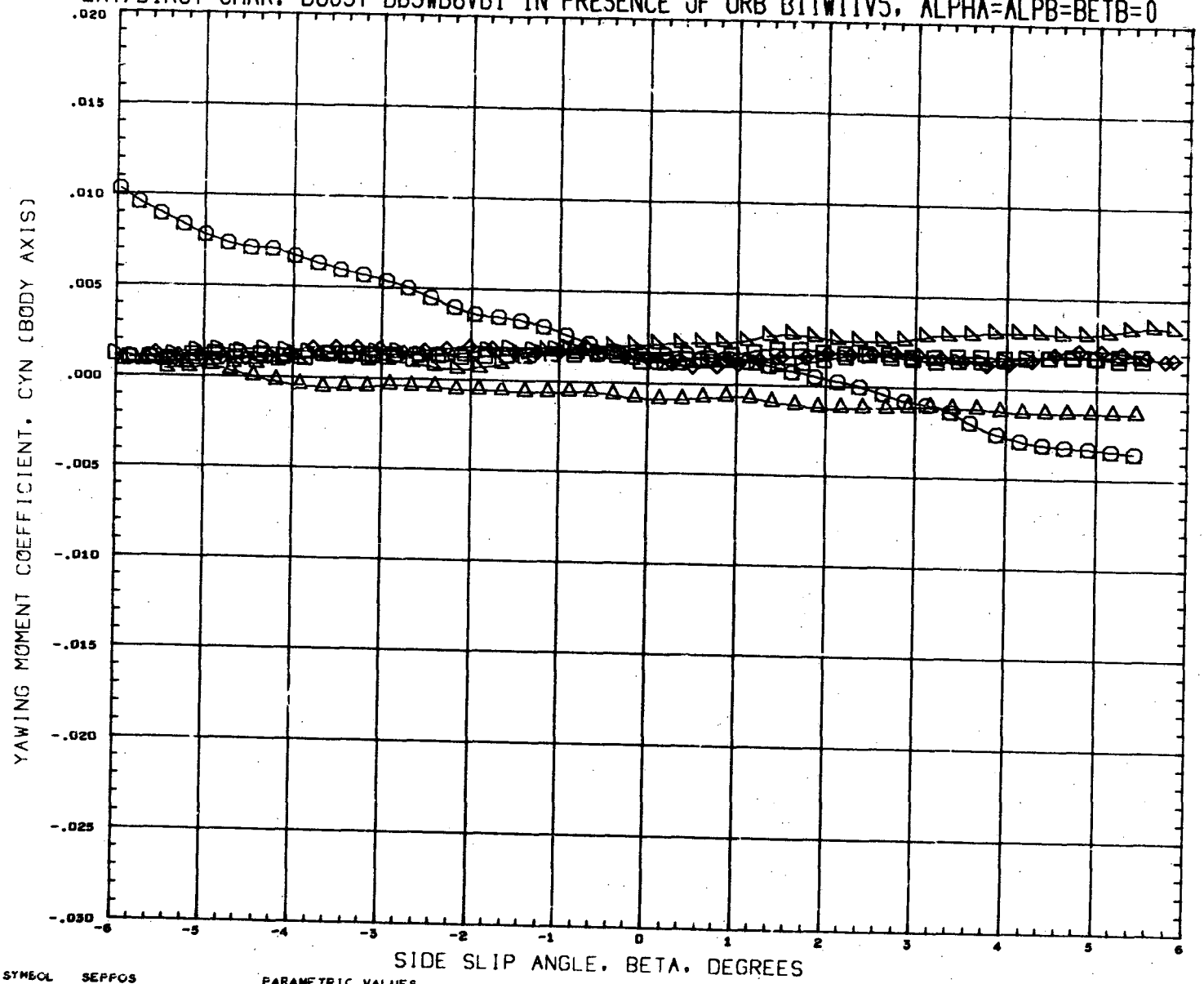
ALPHA	0.104	MACH		1.100
ALPB	0.192	BETB	-	0.010

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.3400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
○	0.003
△	0.004
□	0.006
◇	0.008
▽	0.009
▷	0.012

PARAMETRIC VALUES

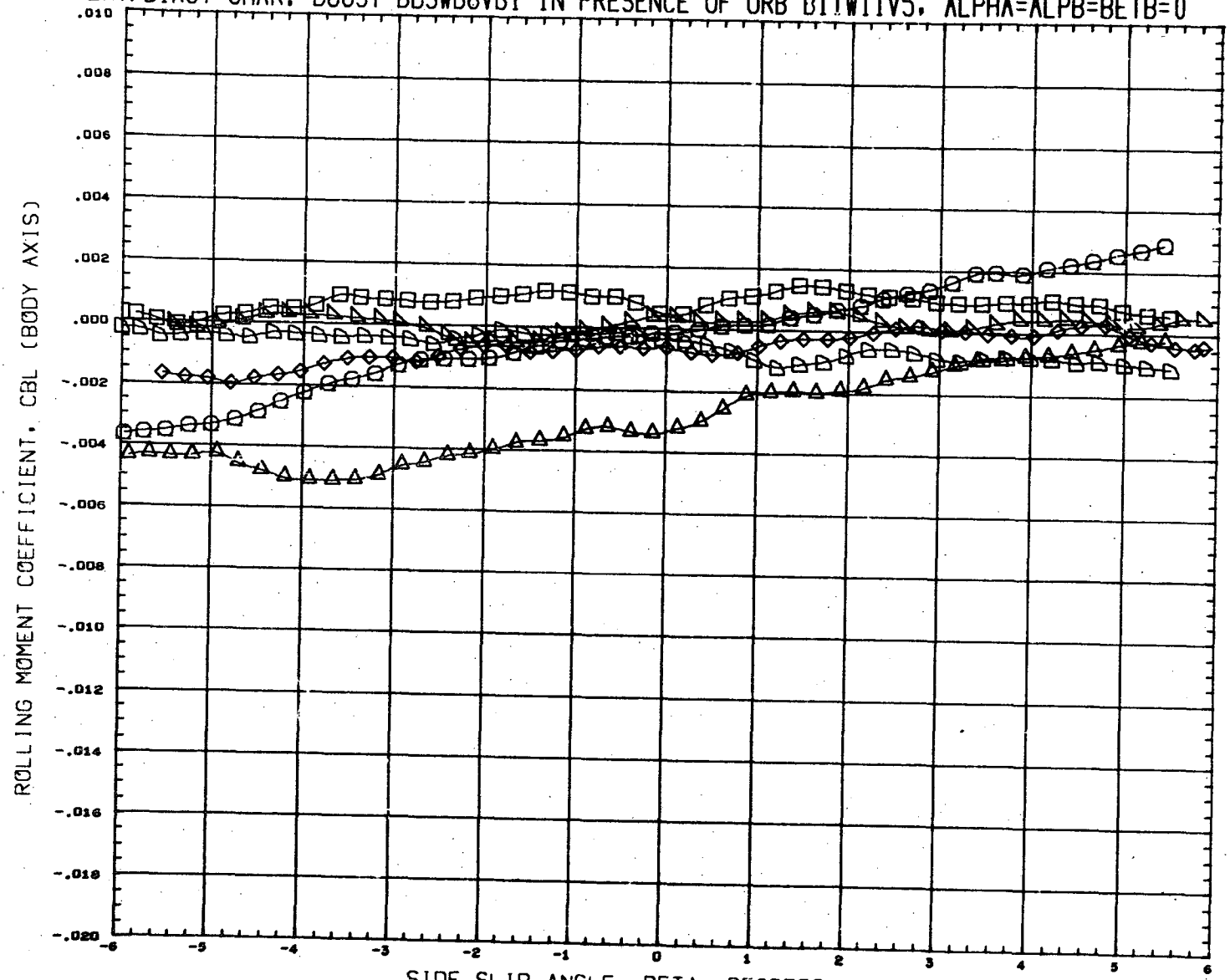
ALPHA	0.104	MACH		1.100	
ALPB	0.192	BETB	-	0.010	

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
◇	0.004
△	0.006
□	0.008
↗	0.009
○	0.012

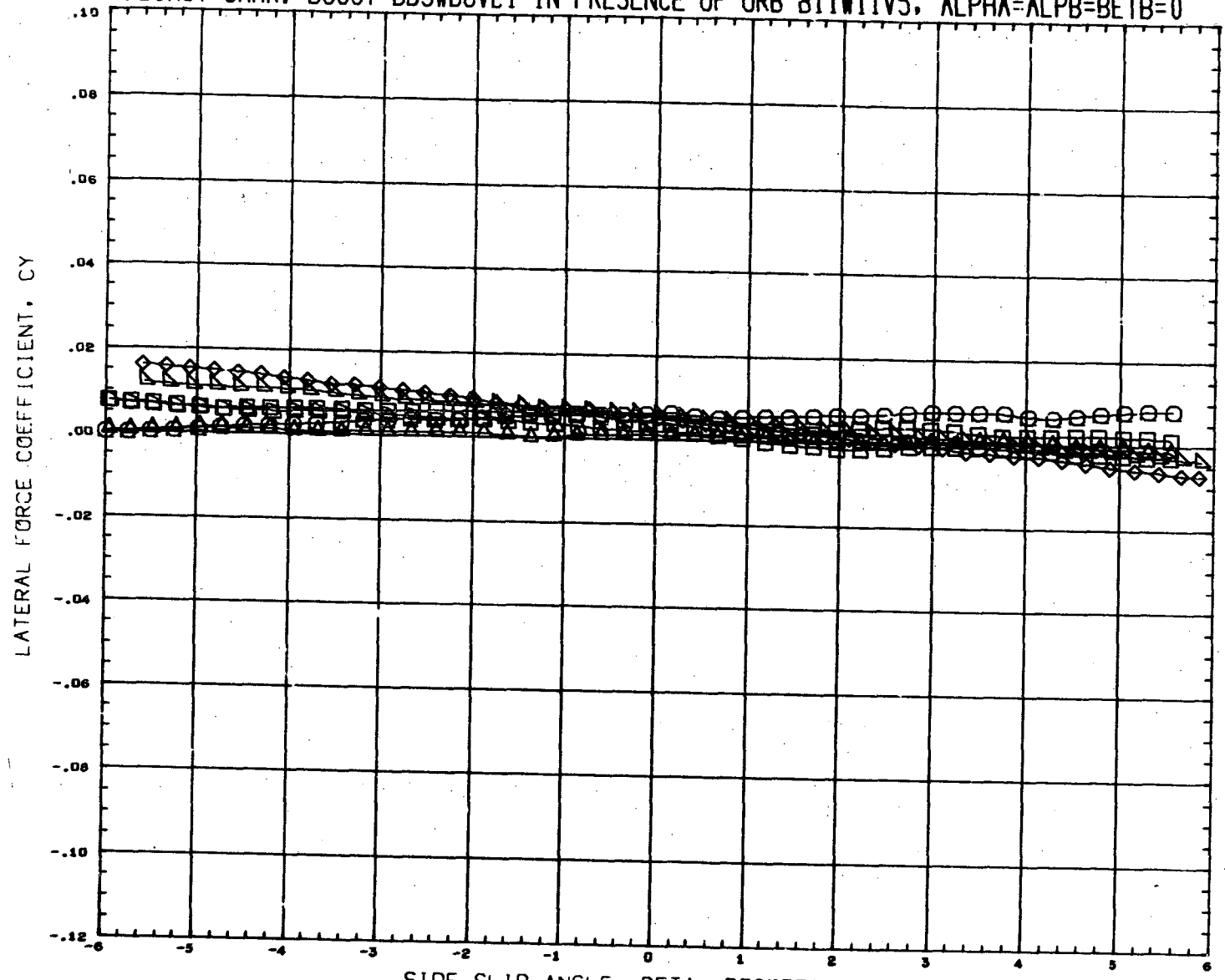
PARAMETRIC VALUES

ALPHA	0.104	MACH	1.100
ALPB	0.192	BETB	- 0.010
REFERENCE FILE	.	.0000			

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
▽	0.004
◇	0.006
□	0.008
▷	0.009
○	0.012

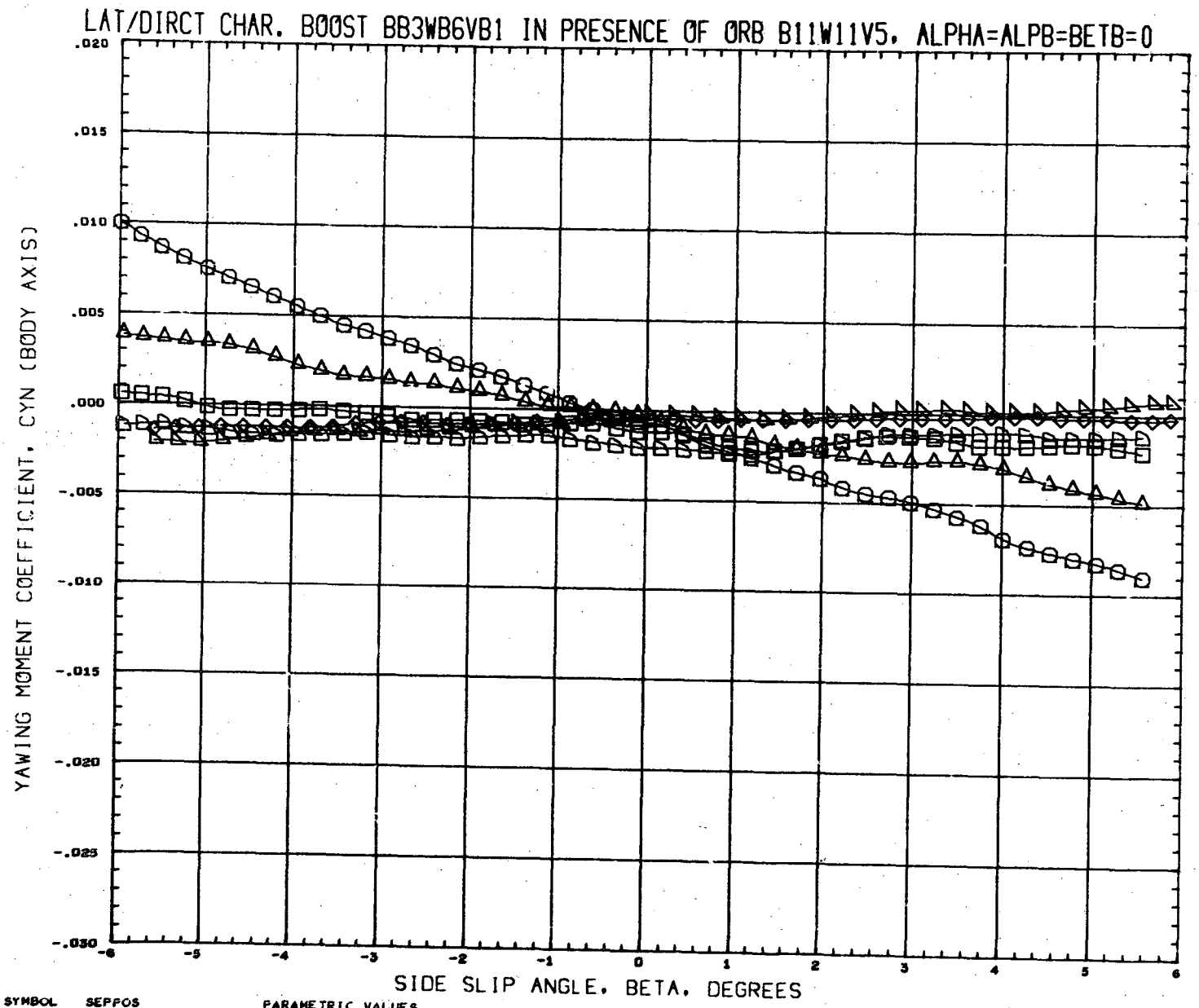
PARAMETRIC VALUES

ALPHA	0.202	MACH		1.370
ALPB	0.169	BETB	-	0.014

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



SYMBOL	SEPPOS
○	0.003
△	0.004
□	0.006
◇	0.008
▽	0.009
D	0.012

PARAMETRIC VALUES

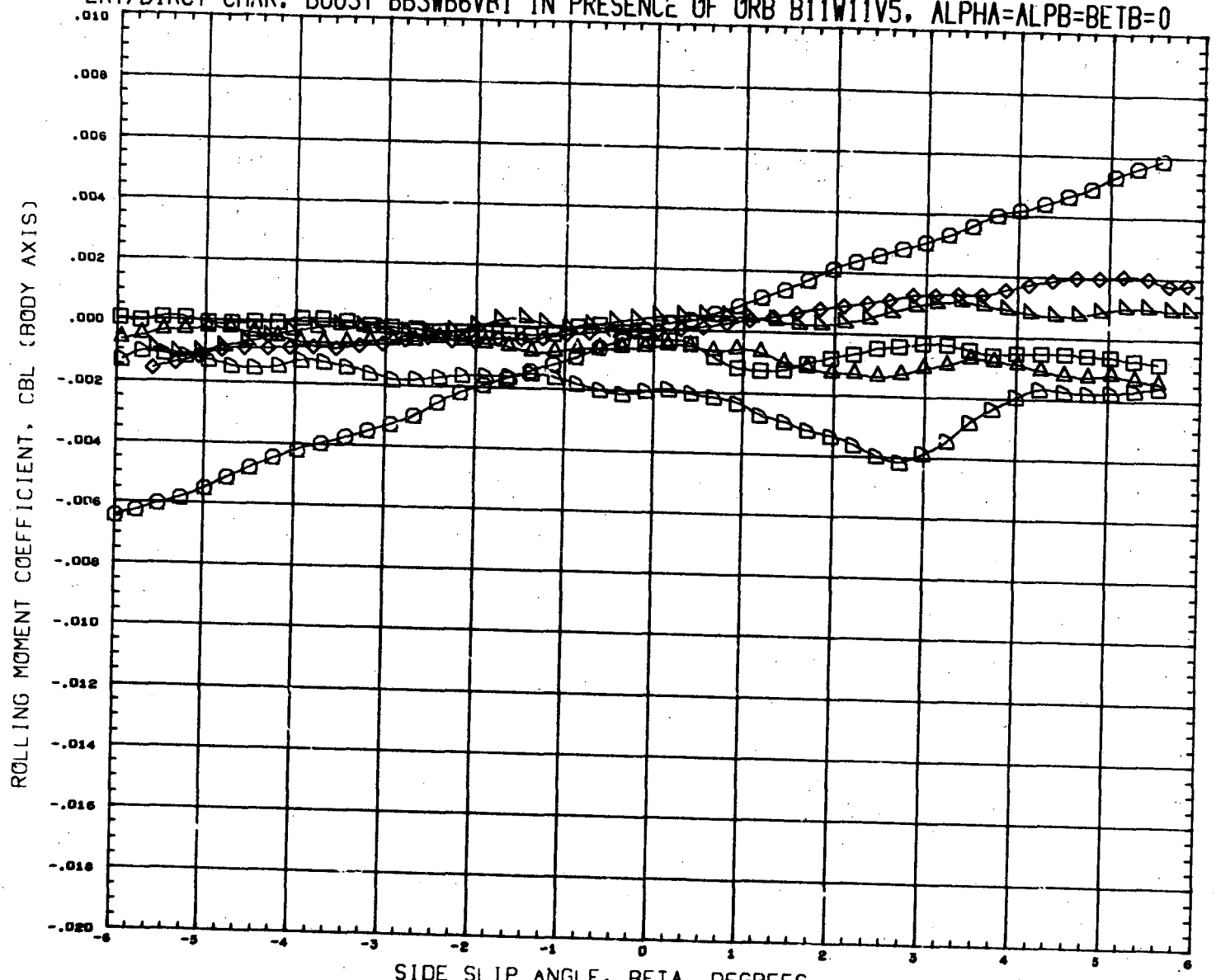
ALPHA	0.202	MACH	1.370
ALPB	0.189	BETB	- 0.014

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3720	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=BETB=0



SYMBOL	SEPPOS
D	0.003
□	0.004
◇	0.006
△	0.008
○	0.009
▽	0.012

PARAMETRIC VALUES

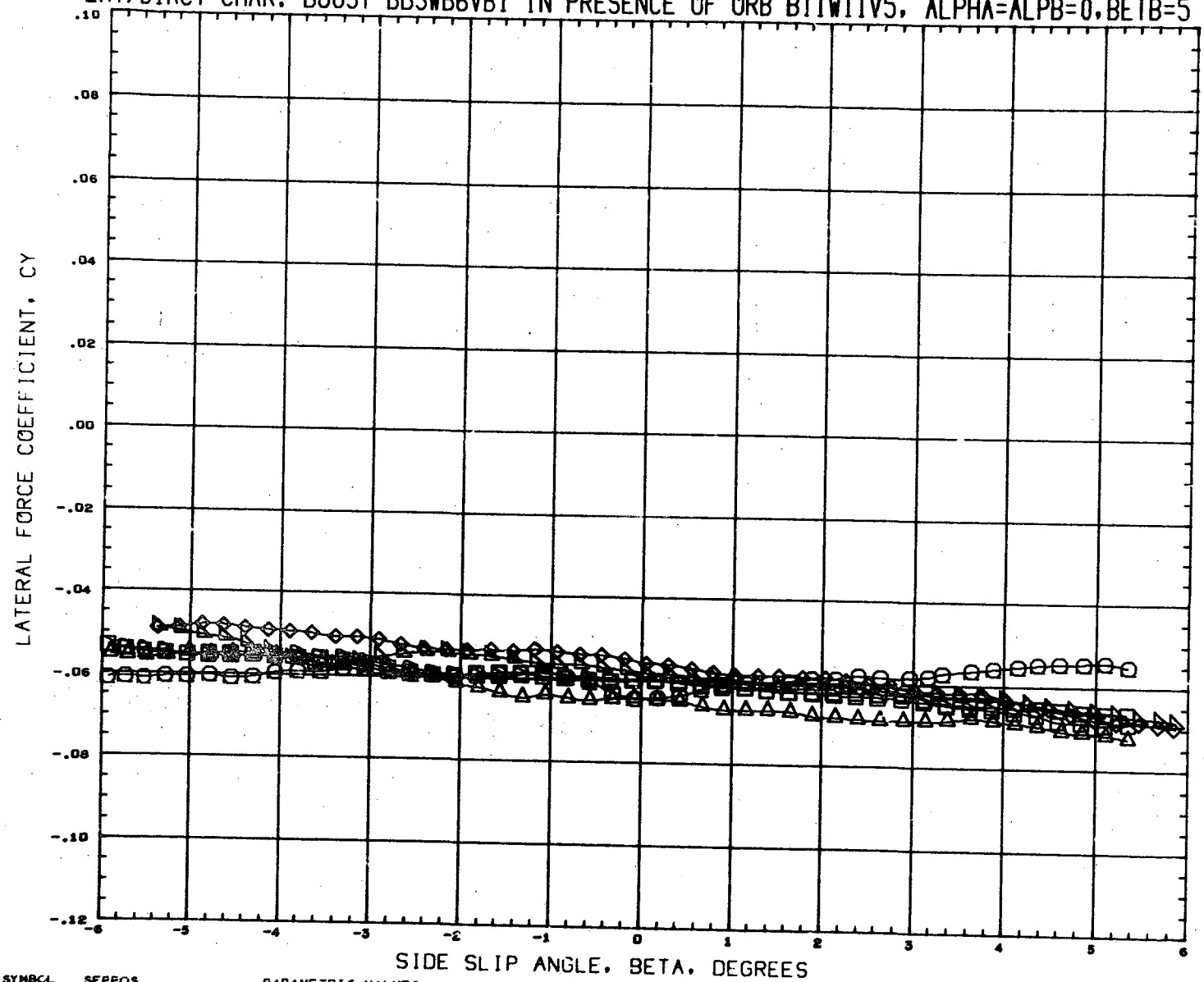
ALPHA	0.202	MACH	1.370
ALPB	0.189	BETB	- 0.014

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5

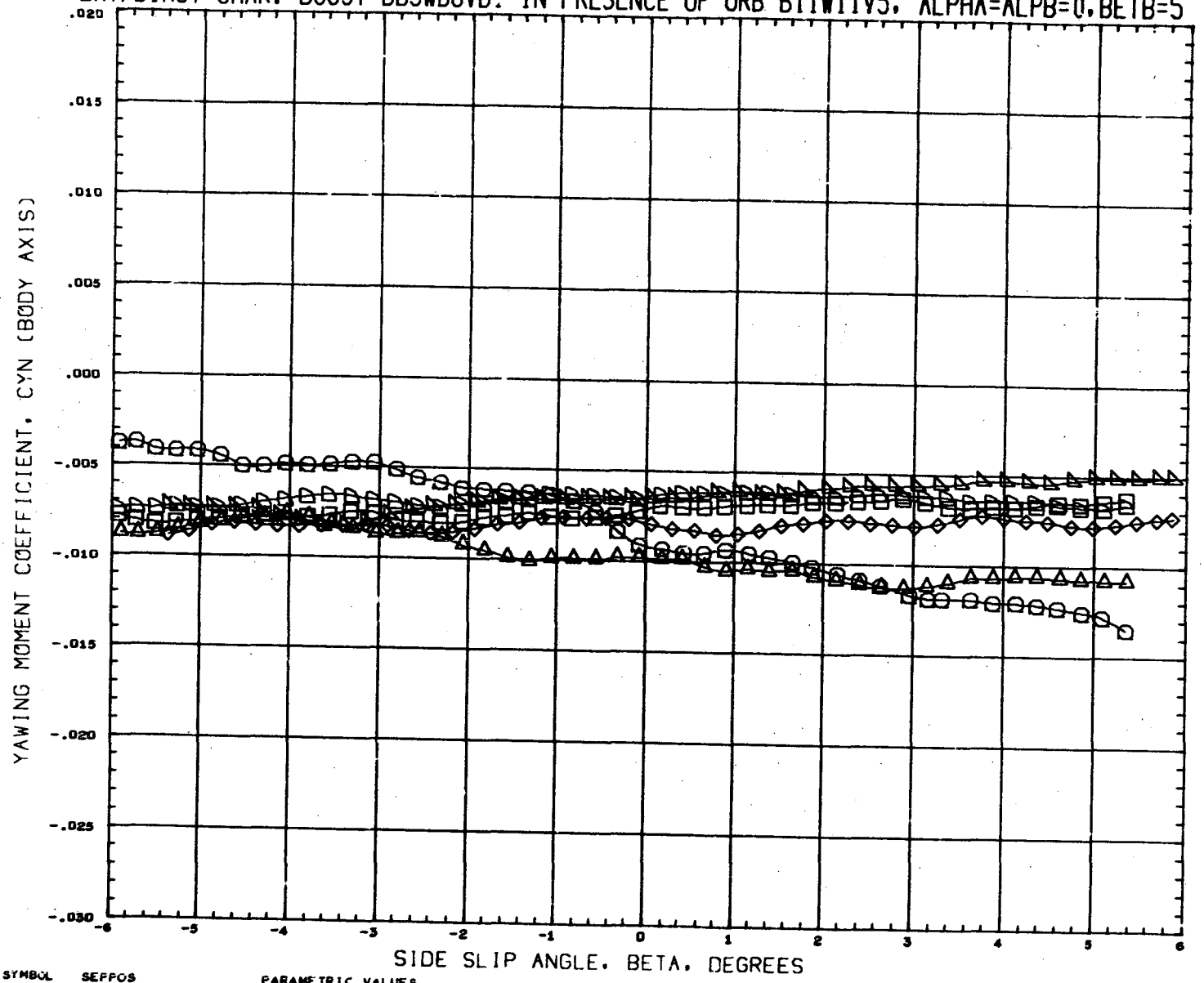


SYMBOL	SEPPOS		PARAMETRIC VALUES		
	0.003	ALPHA	0.037	MACH	0.590
	0.004	ALPB	0.140	BETB	5.100
	0.006				
	0.008				
	0.009				
	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5. ALPHA=ALPB=0.BETB=5



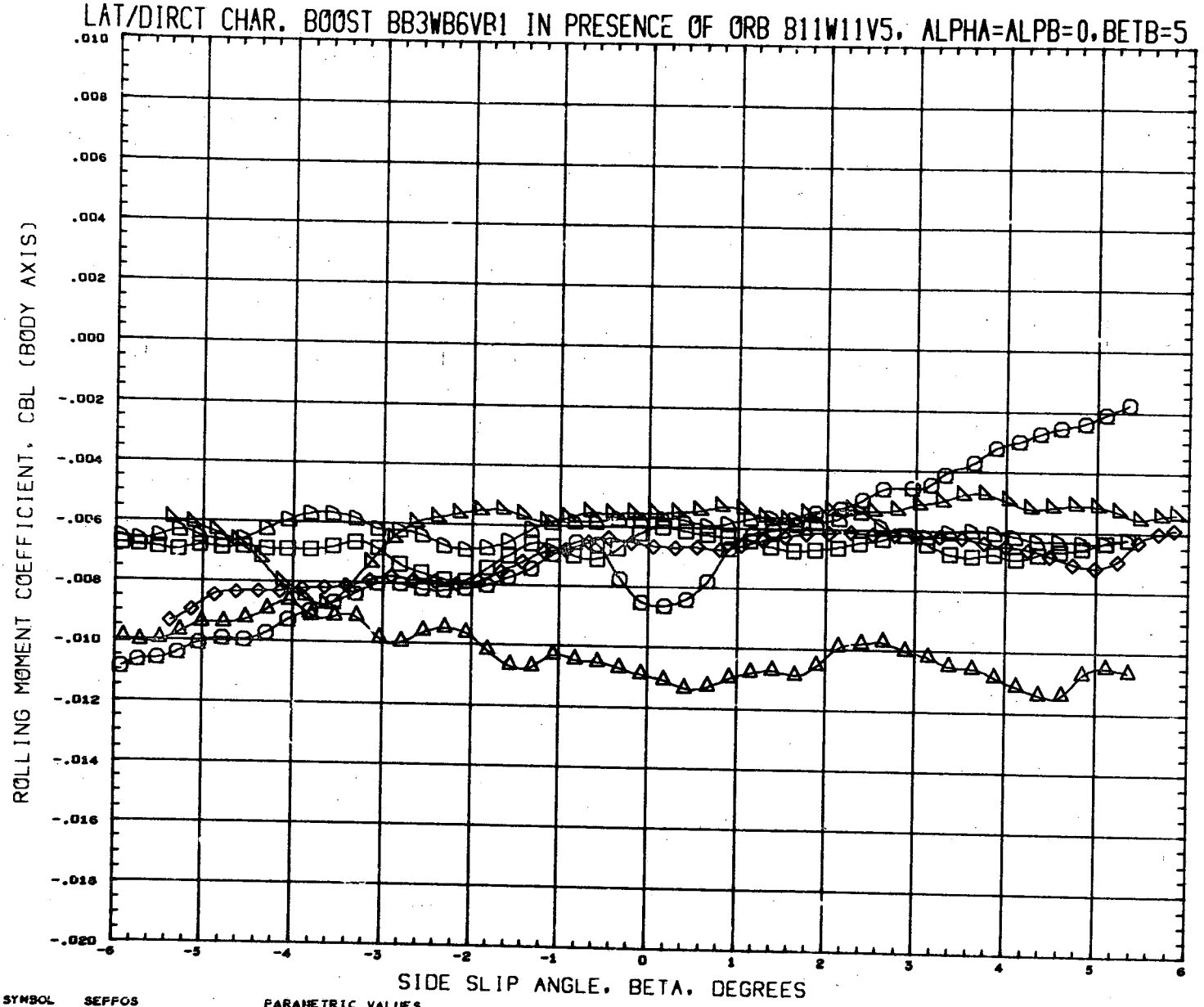
SYMBOL	SEPPOS
▽	0.003
□	0.004
◇	0.006
△	0.008
○	0.009
⬠	0.012

PARAMETRIC VALUES

ALPHA	0.037	MACH	0.590	
ALPB	0.140	BETB	5.100	
REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



SYMBOL	SEFFOS
D	0.003
△	0.004
◇	0.006
□	0.008
▽	0.009
○	0.012

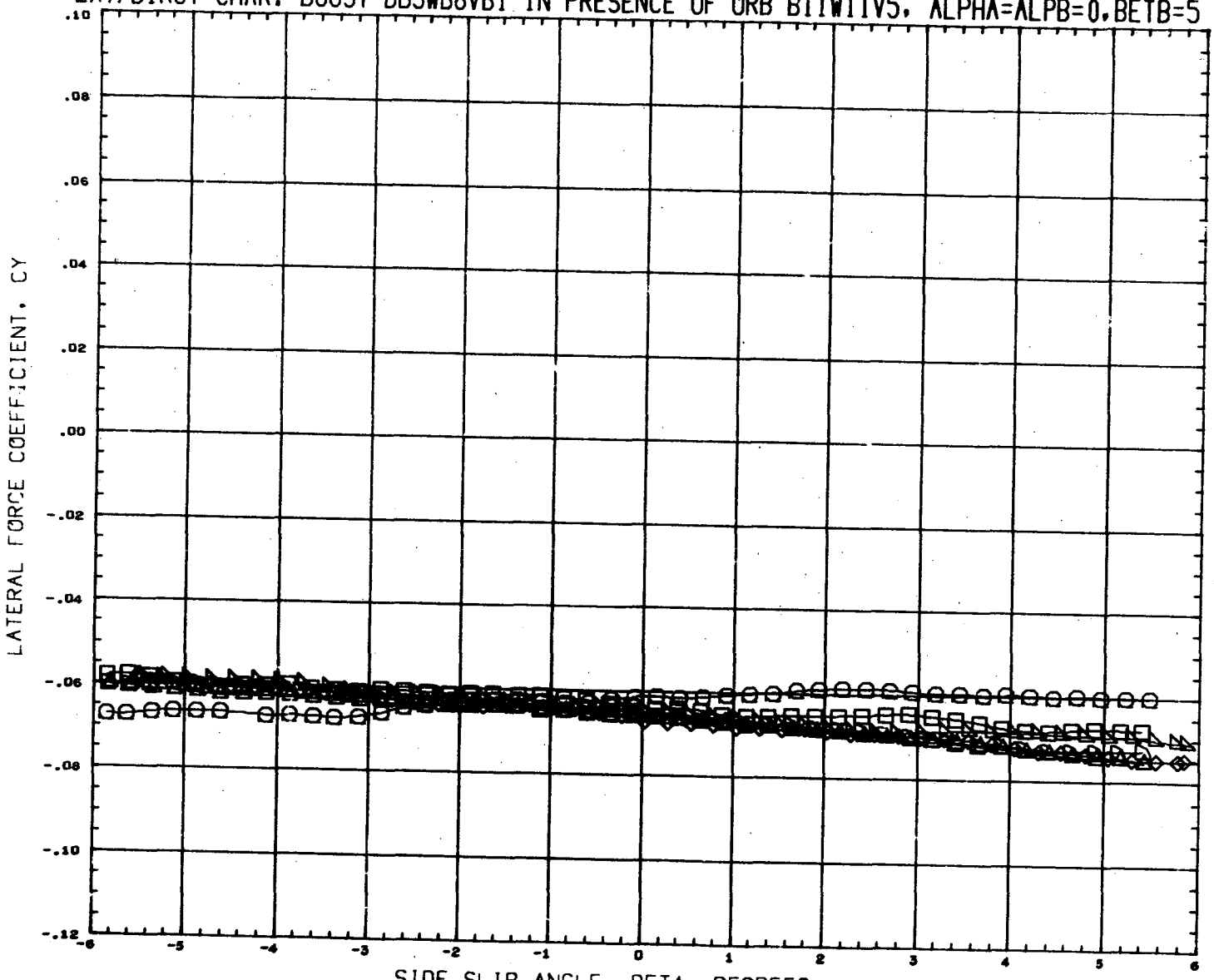
PARAMETRIC VALUES

ALPHA	0.037	MACH	0.590
ALFB	0.140	BETB	5.100
REFERENCE FILE		.0000	

REFERENCE INFORMATION

CREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRF	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
○	0.003
△	0.004
◇	0.006
□	0.008
▽	0.009
▷	0.012

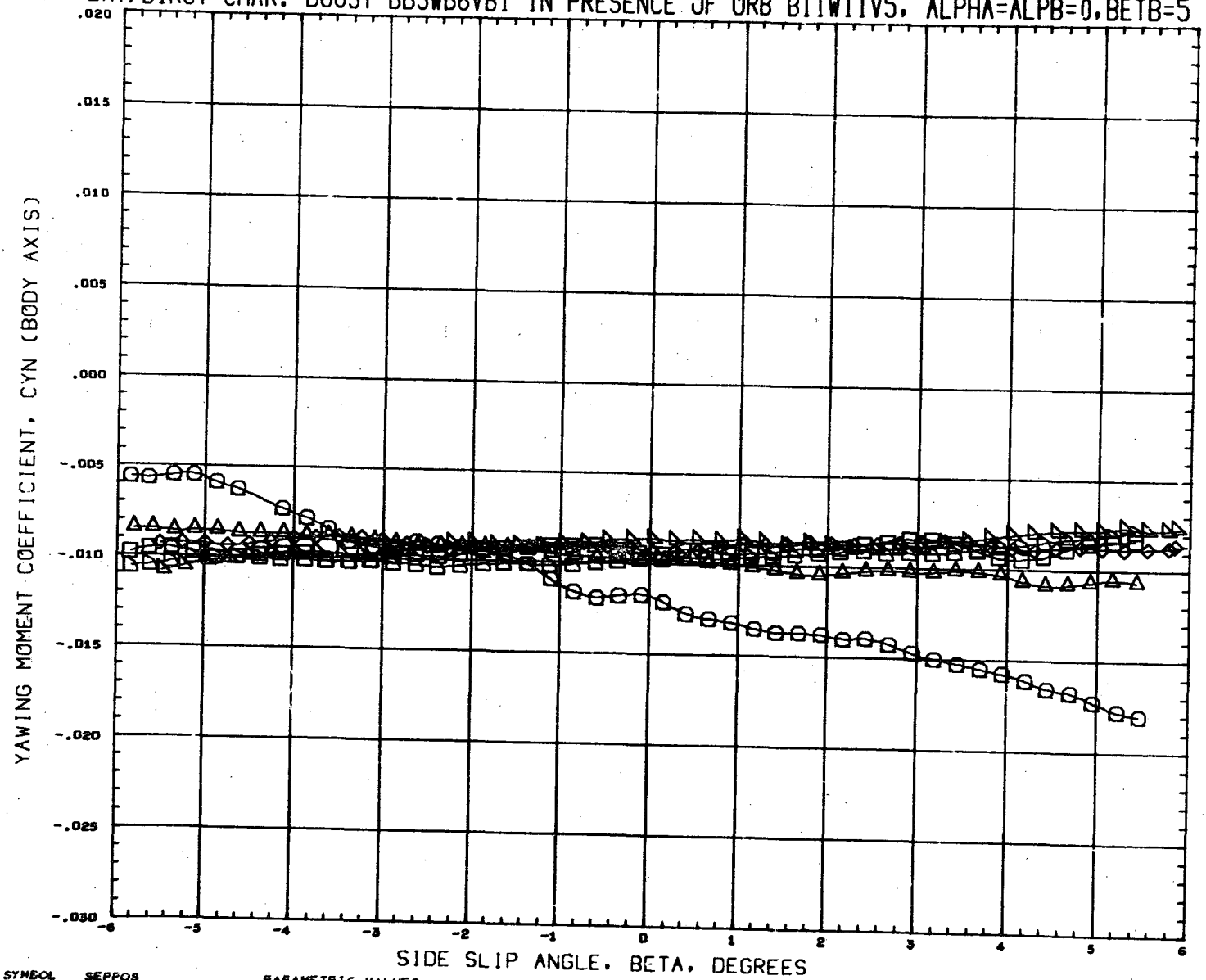
PARAMETRIC VALUES

ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184
REFERENCE FILE		.0000		

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
▷	0.003
□	0.004
◇	0.006
△	0.008
○	0.009
	0.012

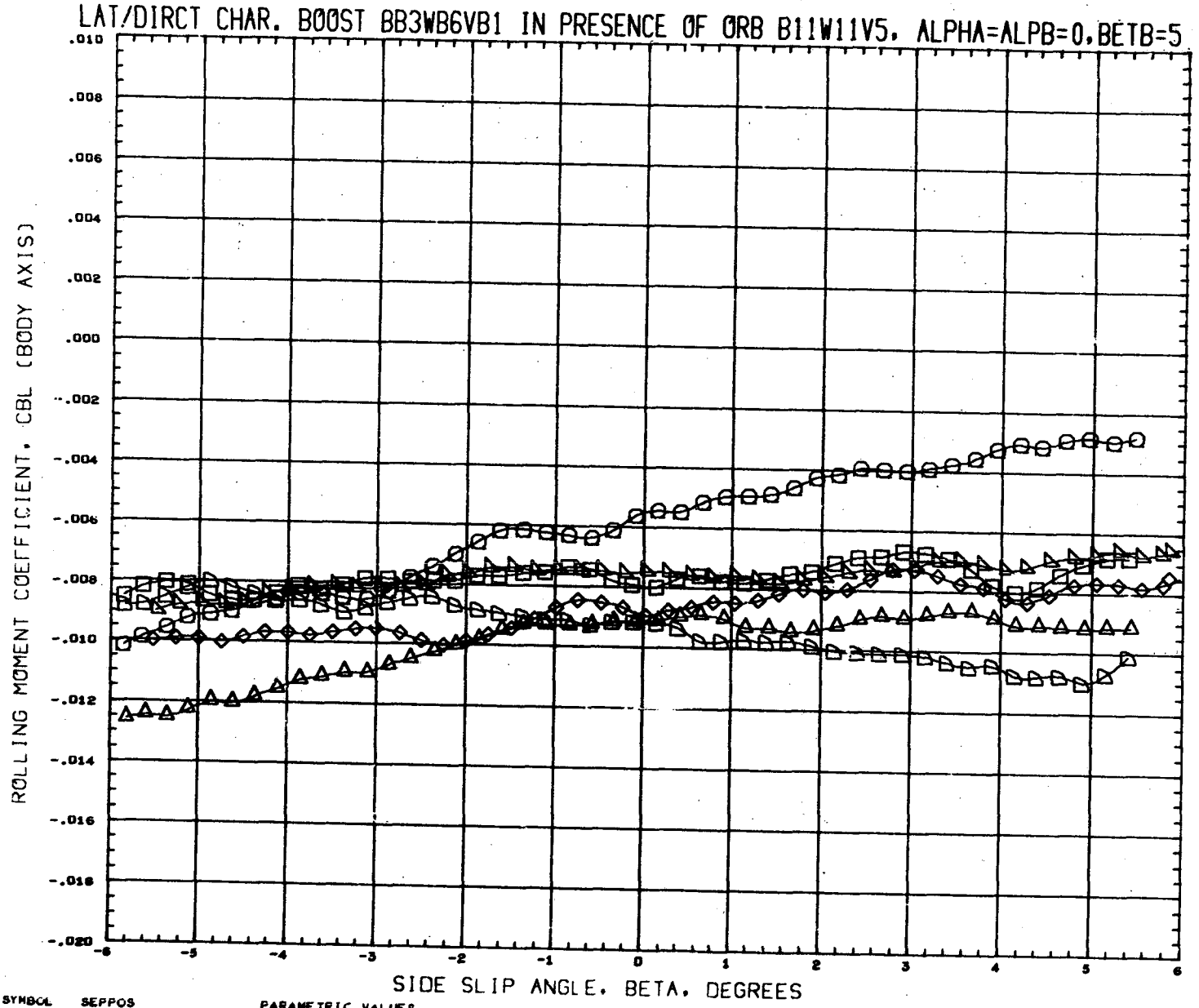
PARAMETRIC VALUES

ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	



SYMBOL	SEPPOS
D	0.003
◇	0.004
□	0.006
△	0.008
○	0.009
D	0.012

PARAMETRIC VALUES

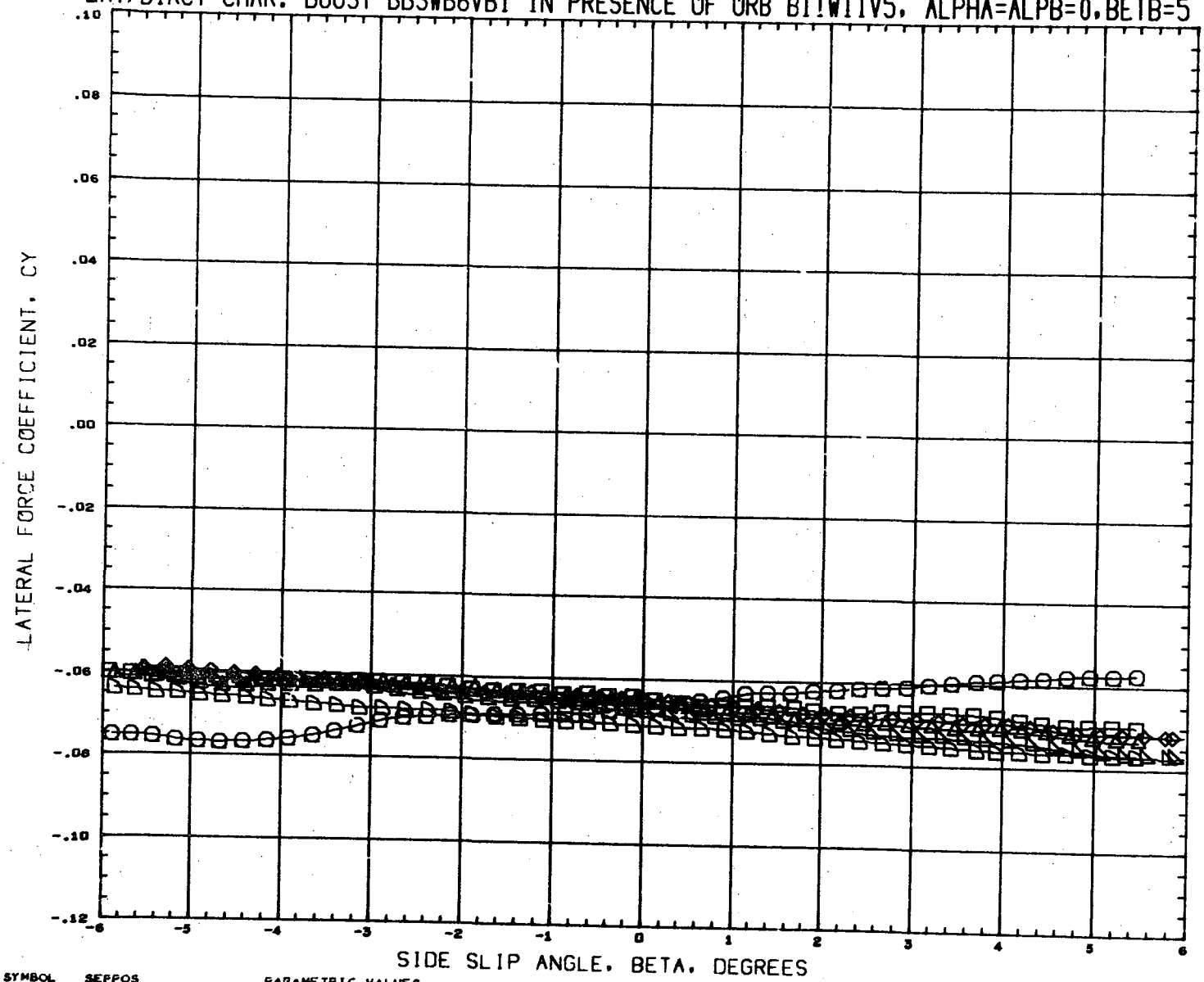
ALPHA	0.107	MACH	0.900
ALPB	0.175	BETB	5.184

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3720	IN
XMRP	15.6990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

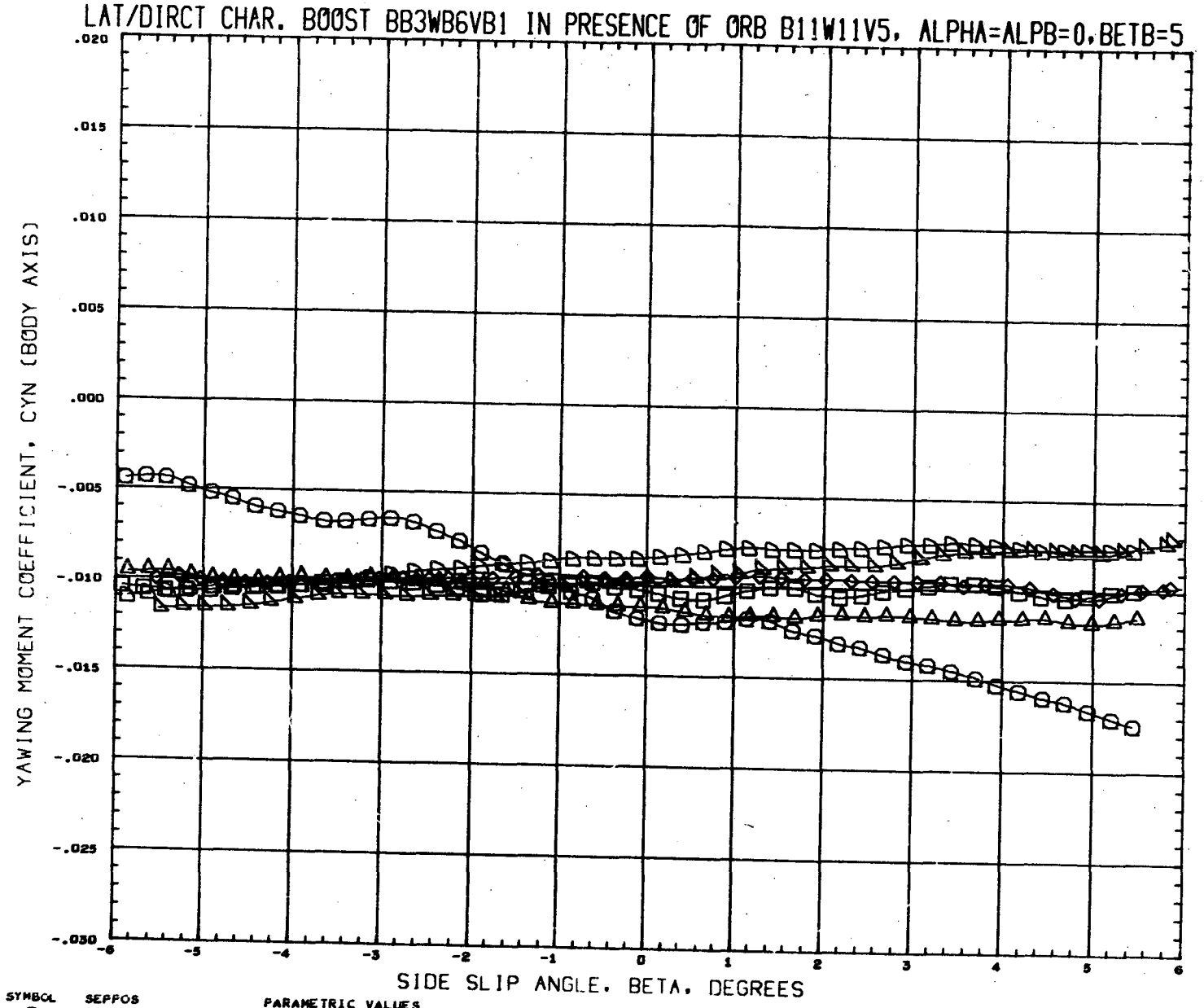
LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B1!W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS		PARAMETRIC VALUES		
	0.003	ALPHA	0.108	MACH	1.100
	0.004	ALPB	0.187	BETB	5.220
	0.006				
	0.008				
	0.009				
	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

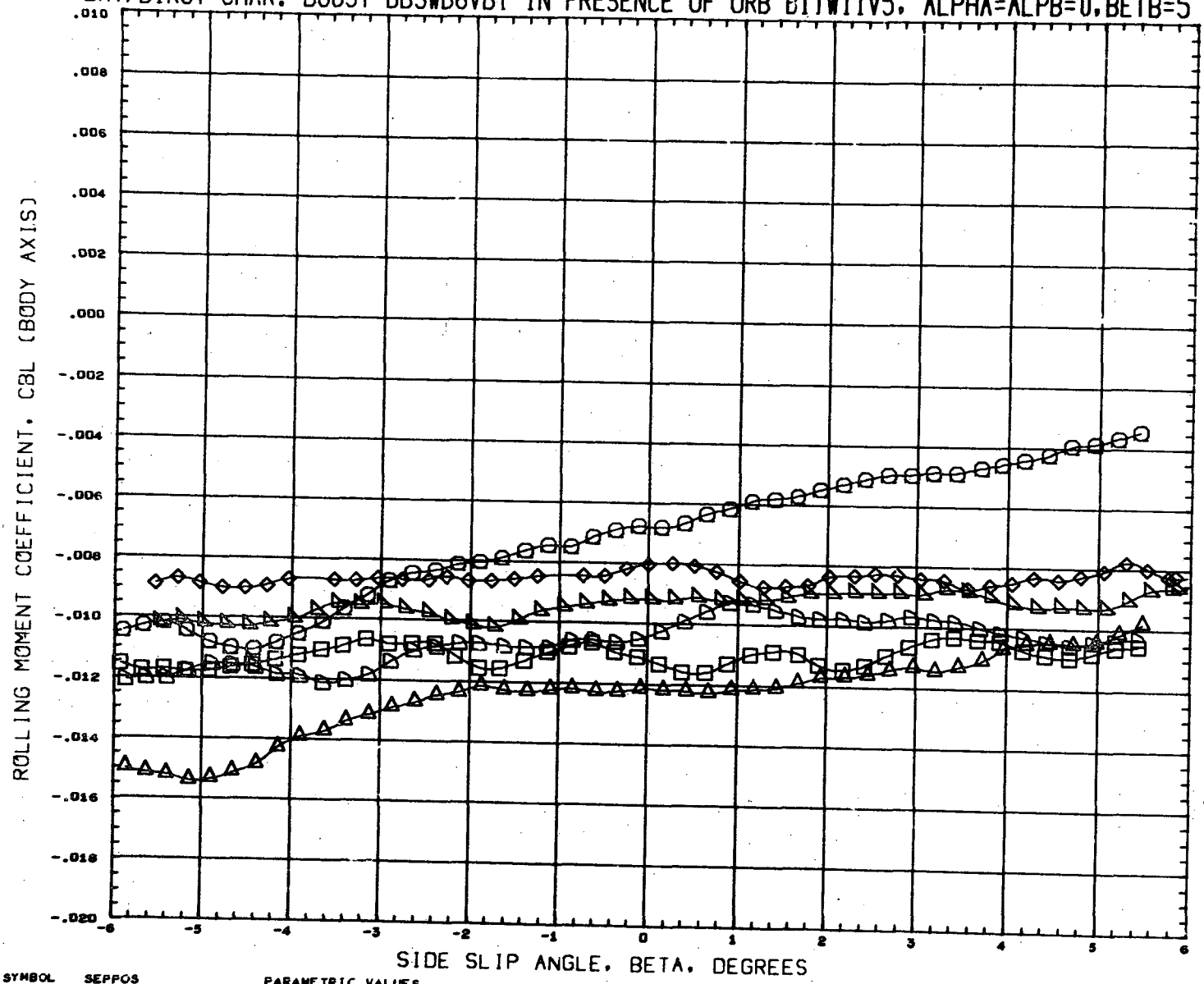


SYMBOL	SEPPOS	PARAMETRIC VALUES			
○	0.003	ALPHA	0.108	MACH	1.100
△	0.004	ALPB	0.107	BETB	5.220
□	0.006				
◇	0.008				
▽	0.009				
▷	0.012	REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
○	0.003
△	0.004
◇	0.006
□	0.008
▷	0.009
⬠	0.012

PARAMETRIC VALUES

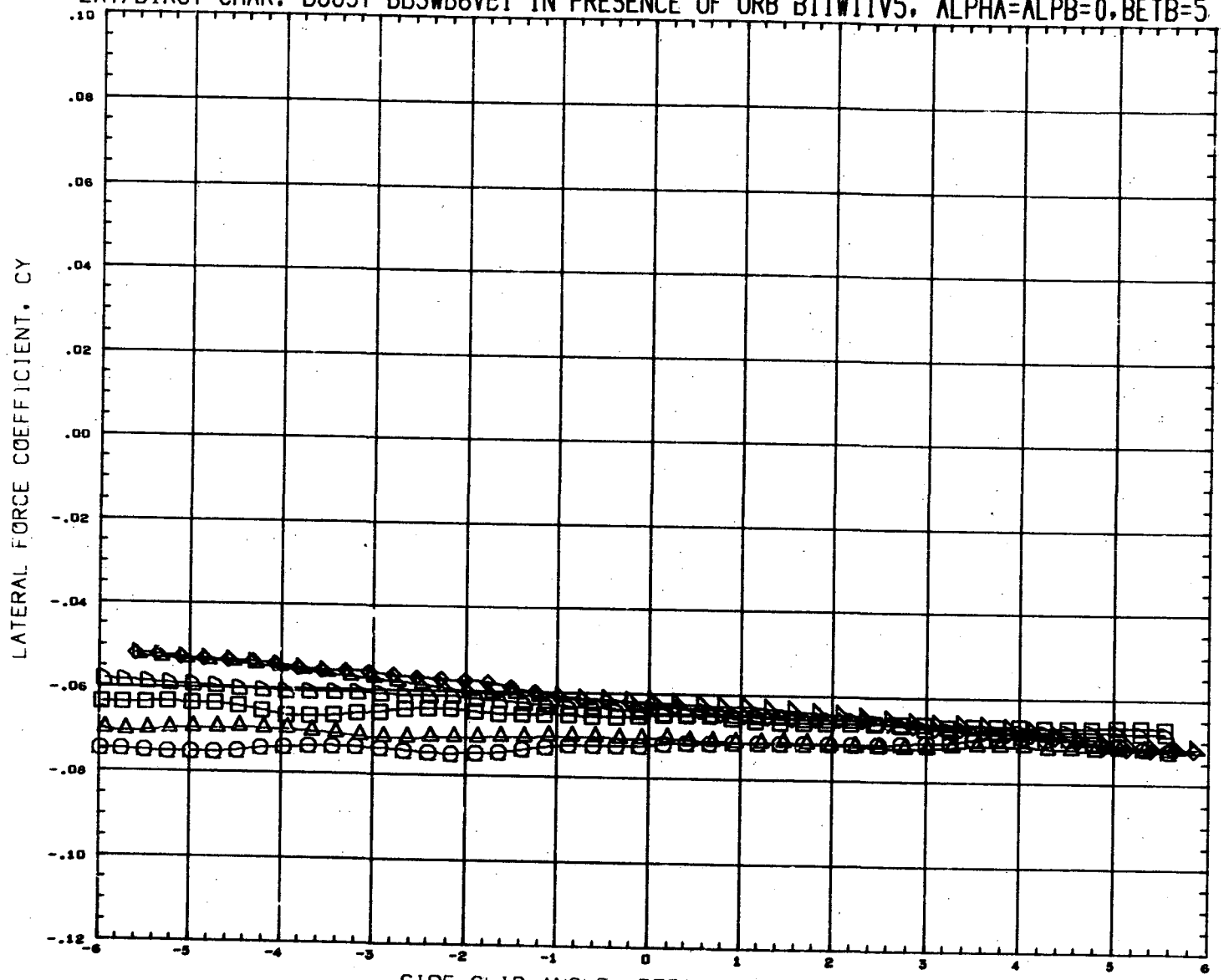
ALPHA	0.108	MACH	1.100
ALFB	0.187	BETB	5.220

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEFFOS
D	0.003
□	0.004
◇	0.006
△	0.008
▽	0.009
○	0.012

PARAMETRIC VALUES

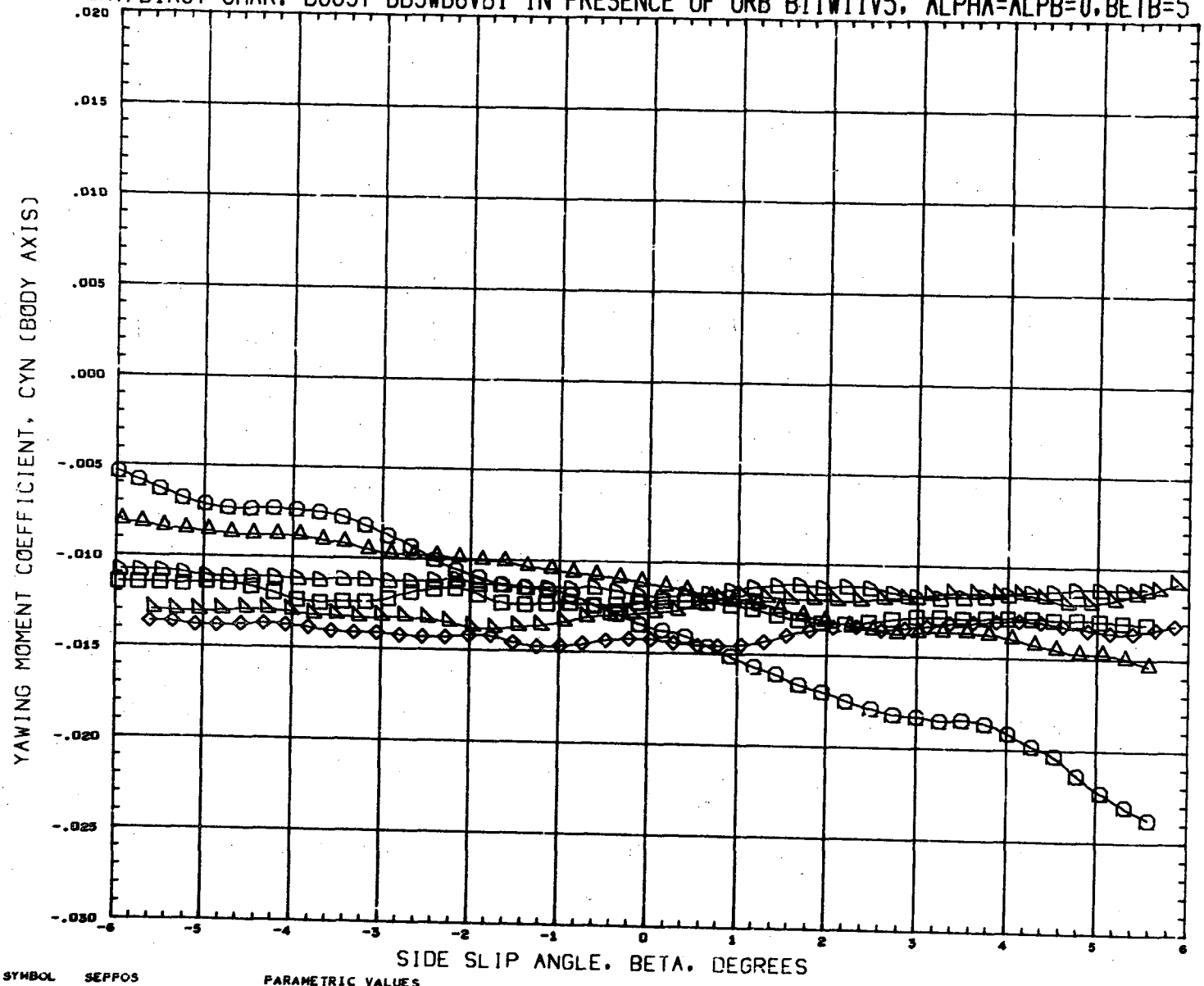
ALPHA	0.247	MACH	1.370
ALPB	0.196	BETB	5.304

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0.BETB=5



SYMBOL	SEPPOS
○	0.003
△	0.004
◇	0.006
□	0.008
▱	0.009
D	0.012

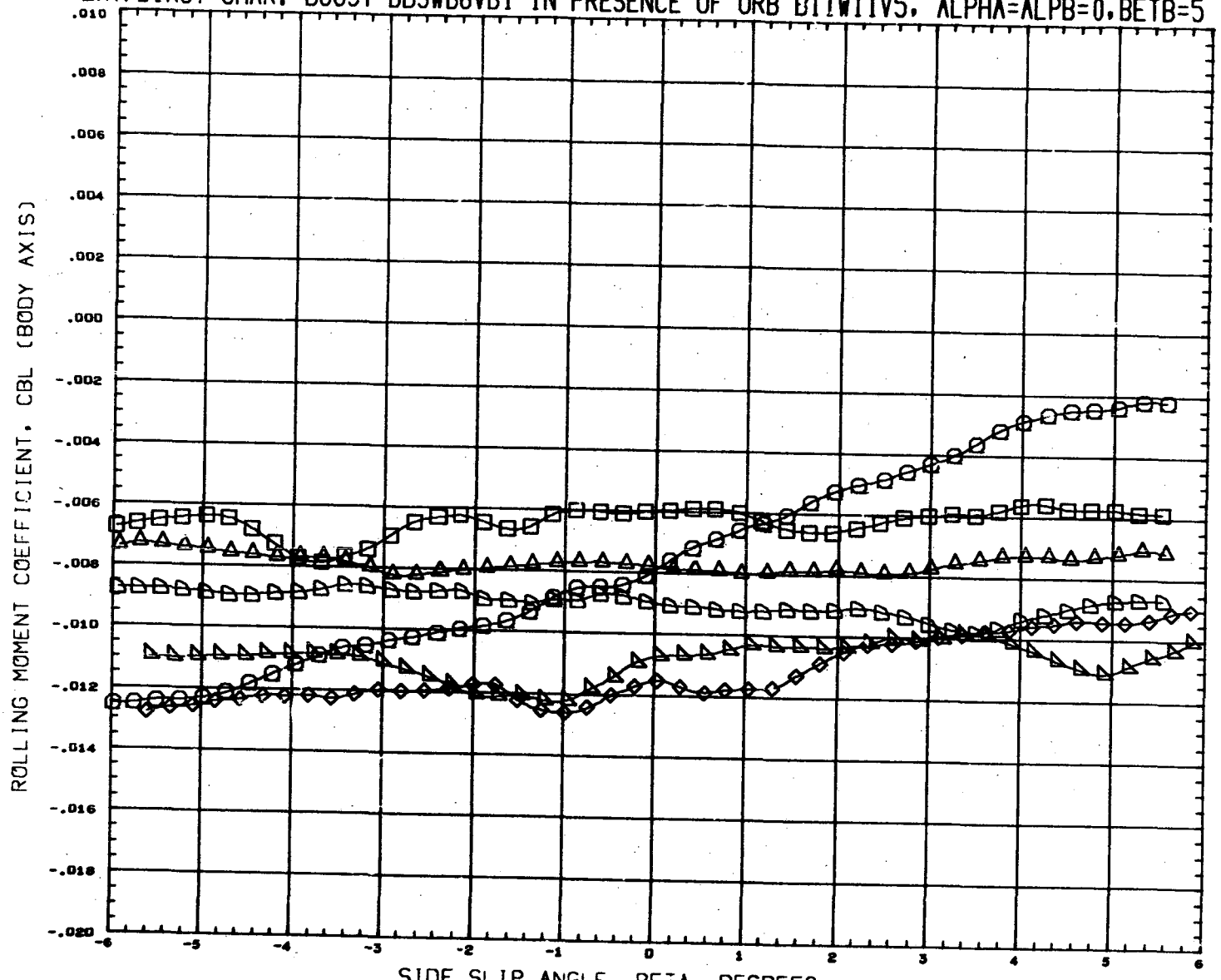
PARAMETRIC VALUES

ALPHA	0.247	MACH	1.370
ALPB	0.196	BETB	5.304
REFERENCE FILE		.0000	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

LAT/DIRCT CHAR. BOOST BB3WB6VB1 IN PRESENCE OF ORB B11W11V5, ALPHA=ALPB=0, BETB=5



SYMBOL	SEPPOS
D	0.003
□	0.004
◇	0.006
△	0.008
○	0.009
	0.012

PARAMETRIC VALUES

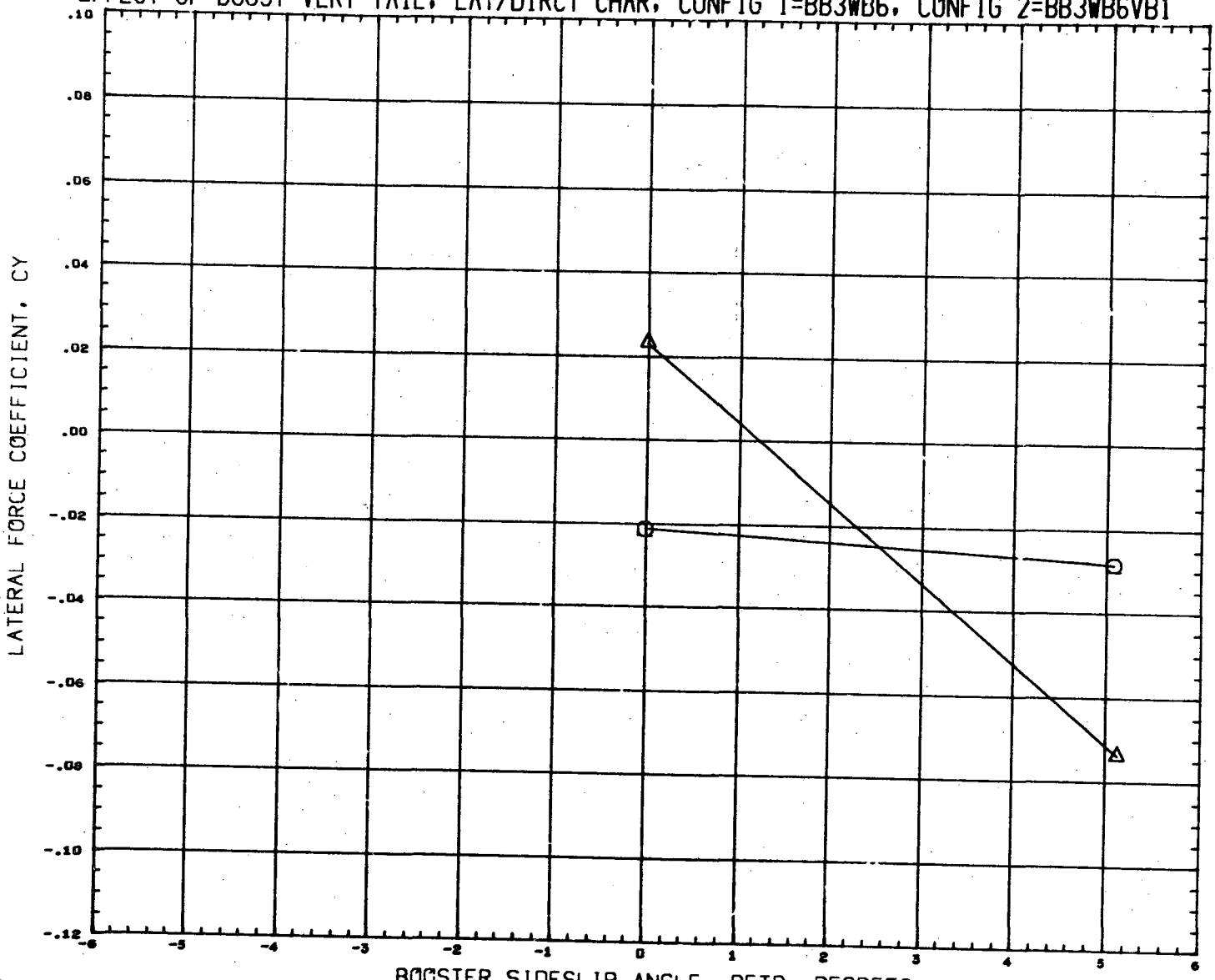
ALPHA	0.247	MACH	1.370
ALPB	0.196	BETB	5.304

REFERENCE FILE .0000

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
△	1.000
○	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000
ALFB	0.142	MACH	0.590

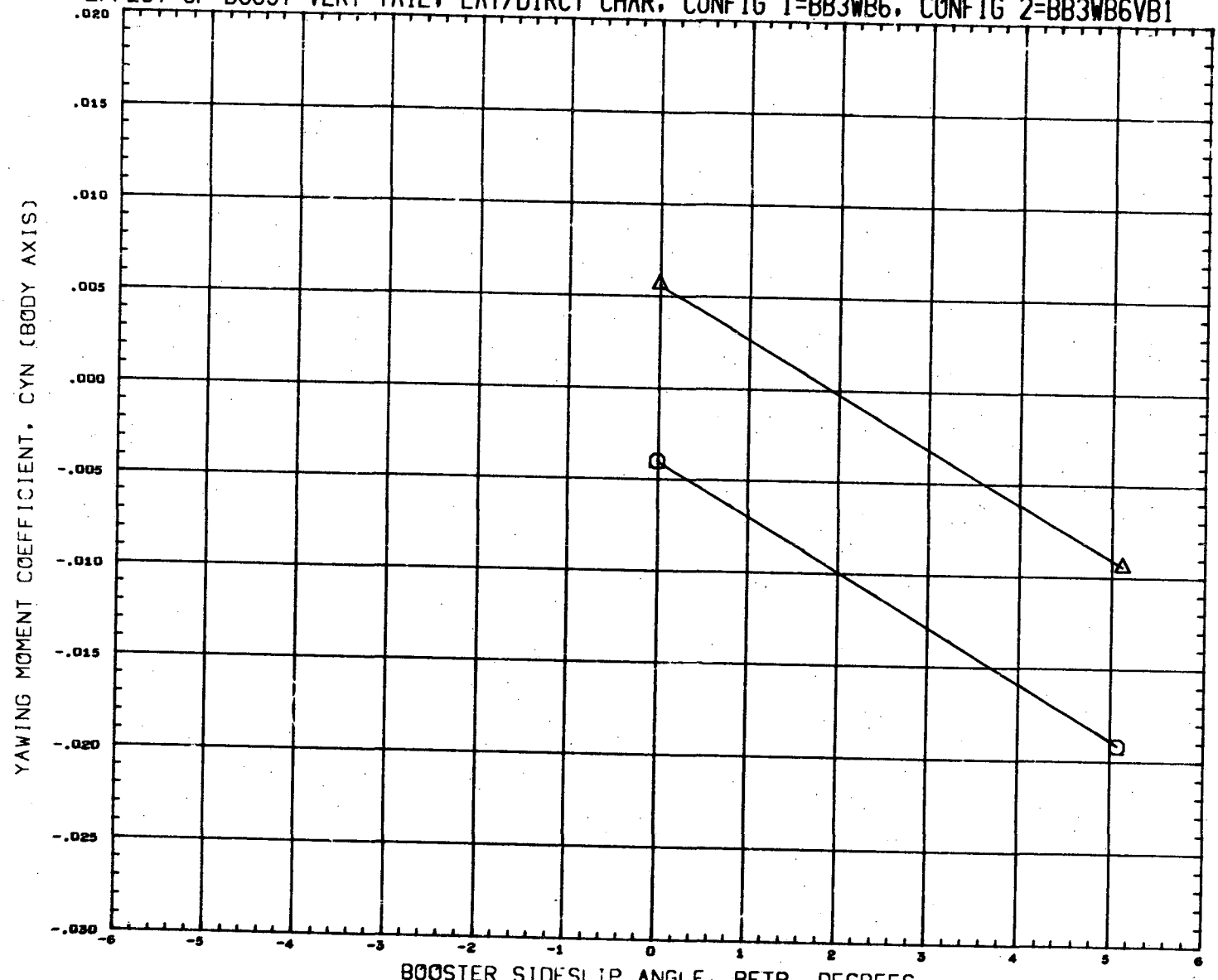
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE H

MSC S-30 BOOSTER BB3WB6 ALONE (NCU080) 29 JUL 71 PAGE 319

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000	
ALPB	0.142	MACH	0.590	

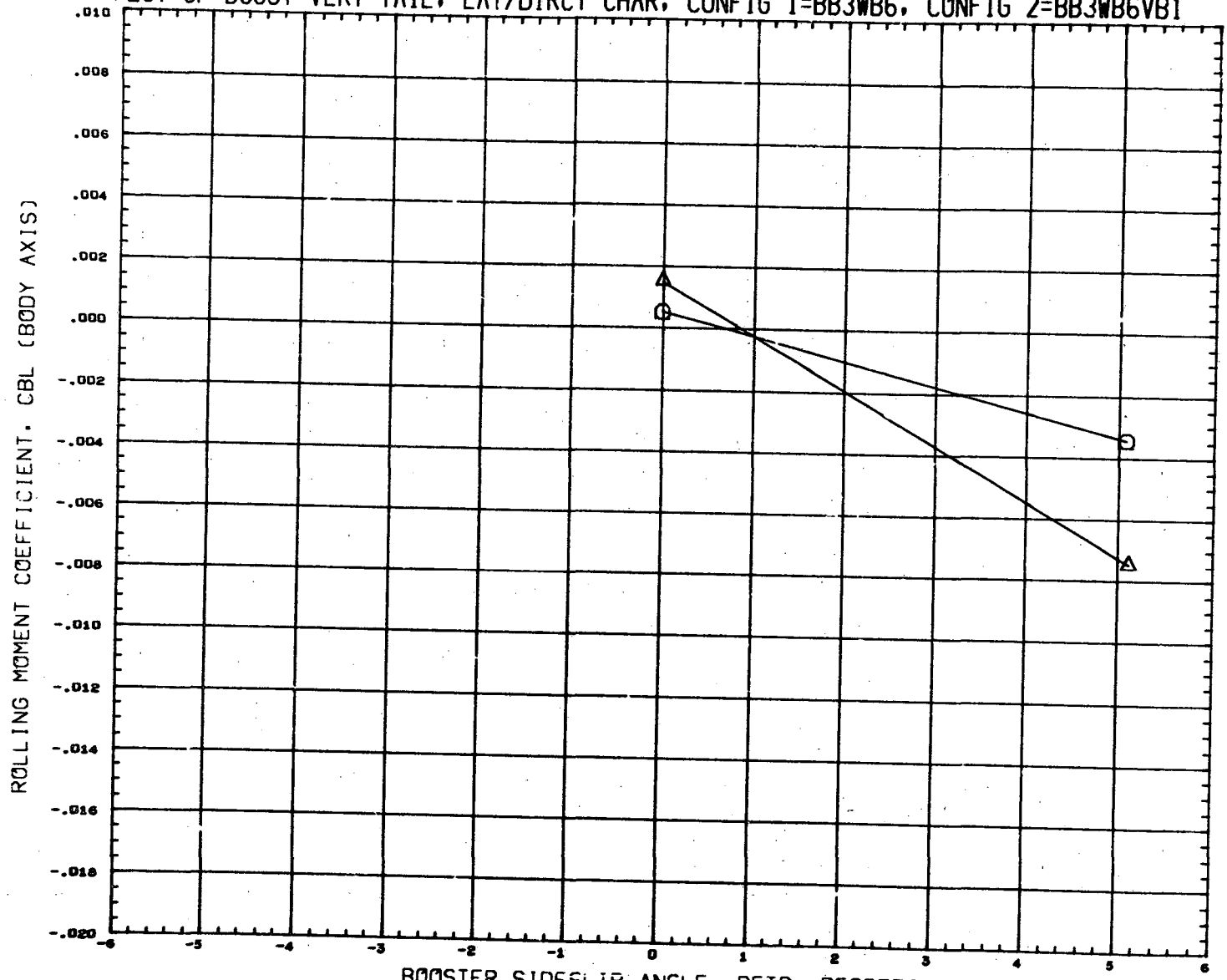
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE H

MSC S-30 BOOSTER BB3WB6 ALONE (NCU080) 29 JUL 71 PAGE 320

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG		PARAMETRIC VALUES		
○	1.000	SEPPOS	0.016	ALPHA	0.000
△	2.000	ALPB	0.142	MACH	0.590

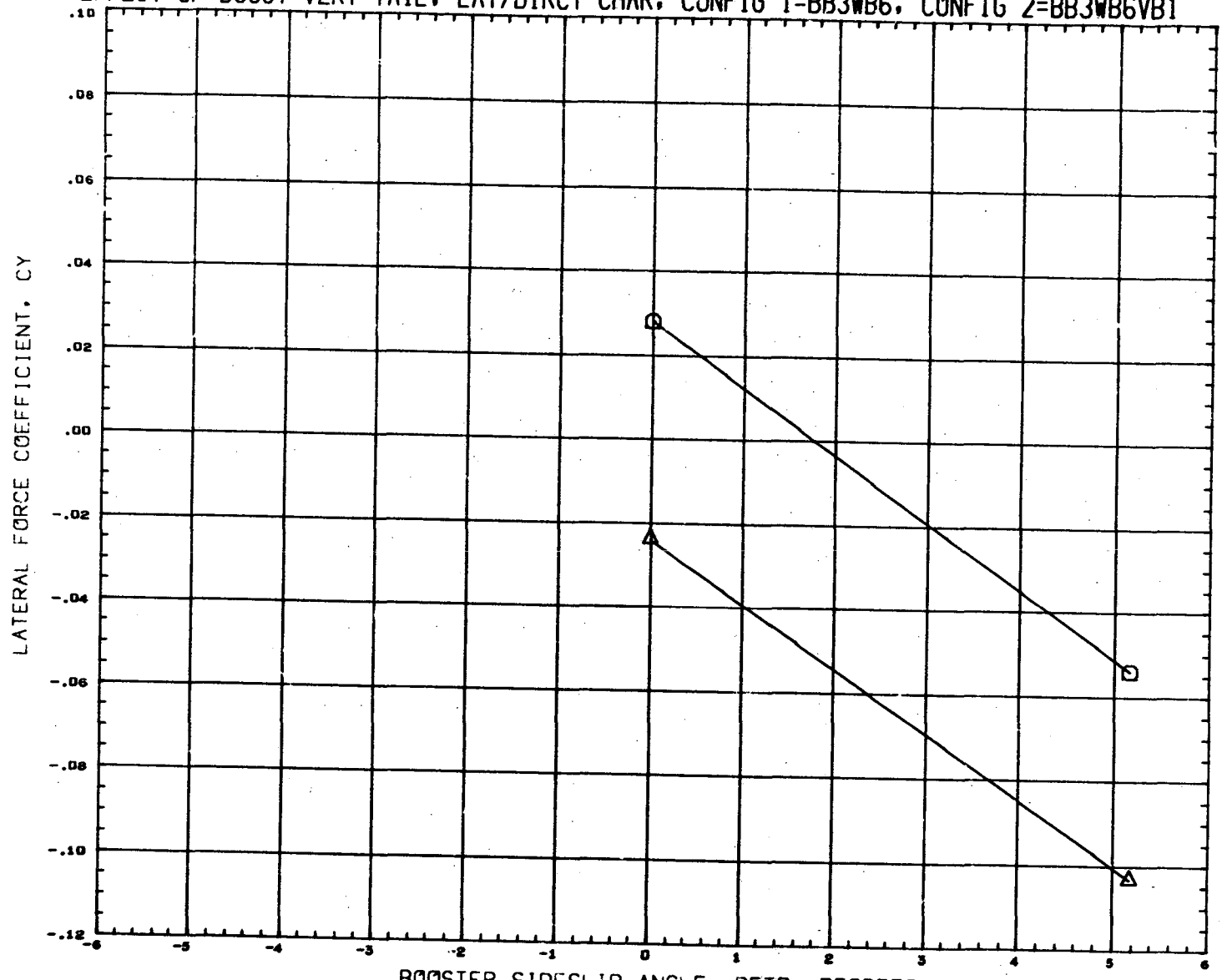
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG		PARAMETRIC VALUES		
○	1.000	SEPPOS	0.016	ALPHA	0.000
△	2.000	ALPB	0.185	MACH	0.900

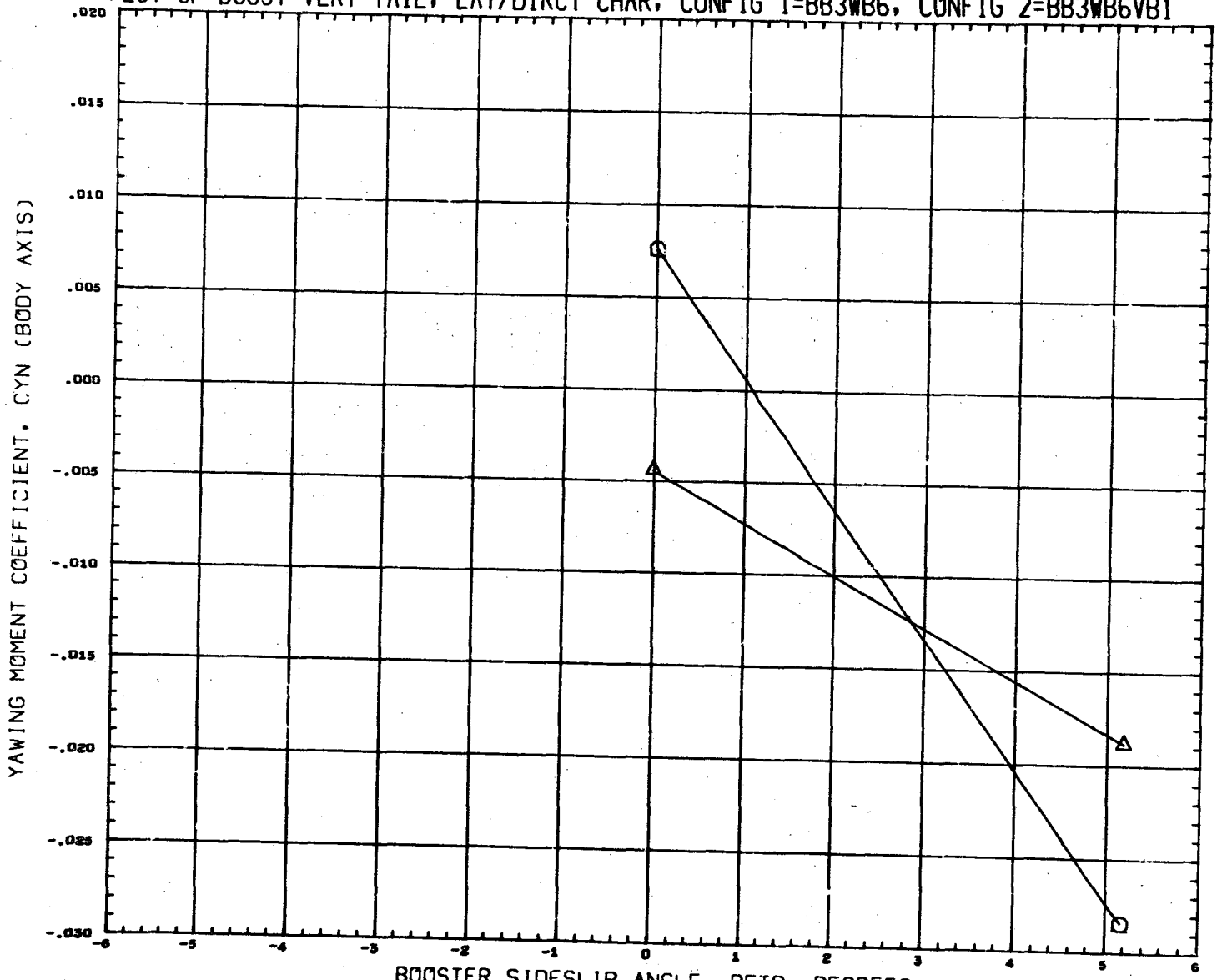
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0068	

DATA HIST. CODE N

MSC S-30 BOOSTER BB3WB6 ALONE (NCU081) 29 JUL 71 PAGE 322

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG		PARAMETRIC VALUES		
○	1.000	SEPPOS	0.016	ALPHA	0.000
△	2.000	ALPB	0.185	MACH	0.900

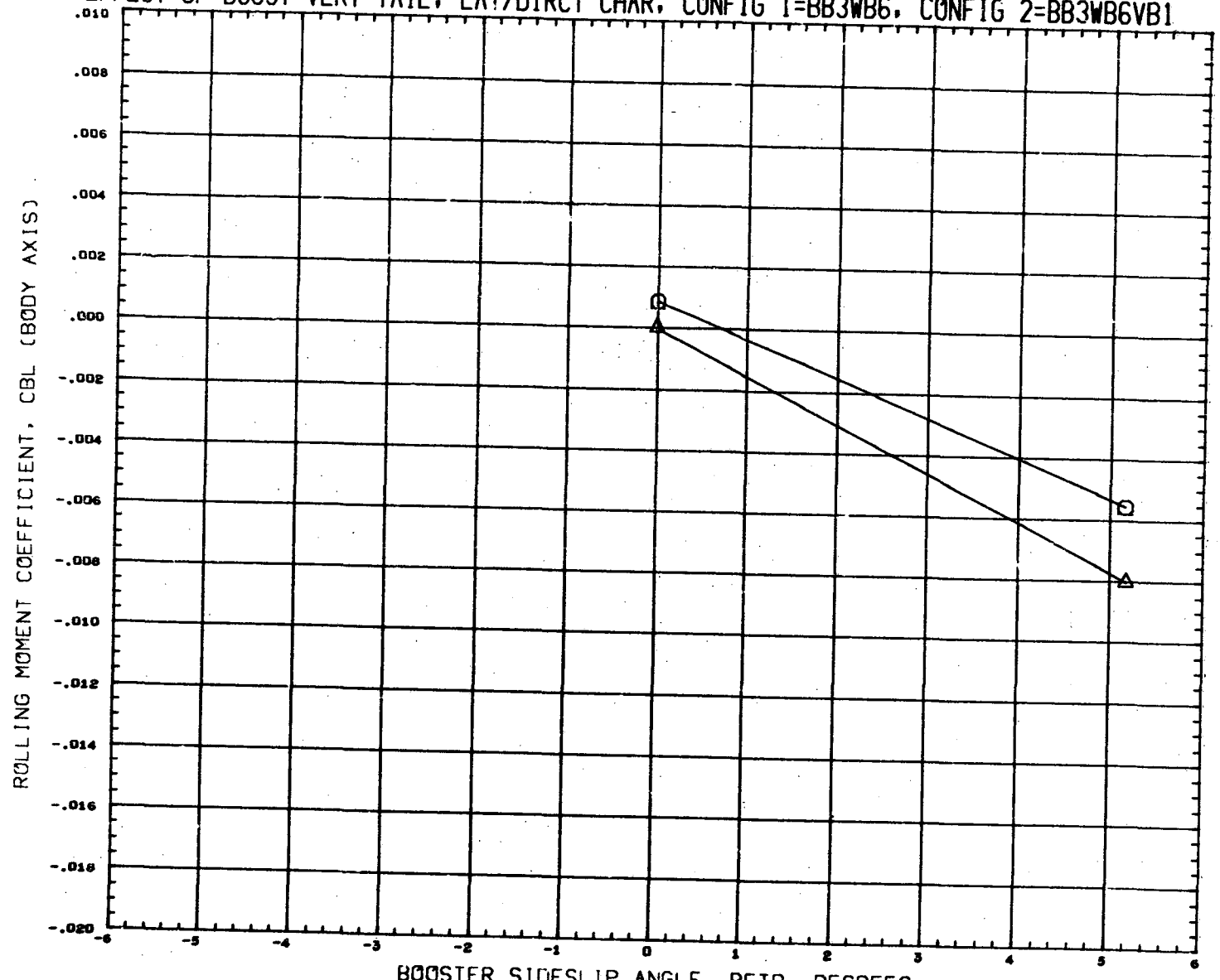
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000
ALPB	0.185	MACH	0.900

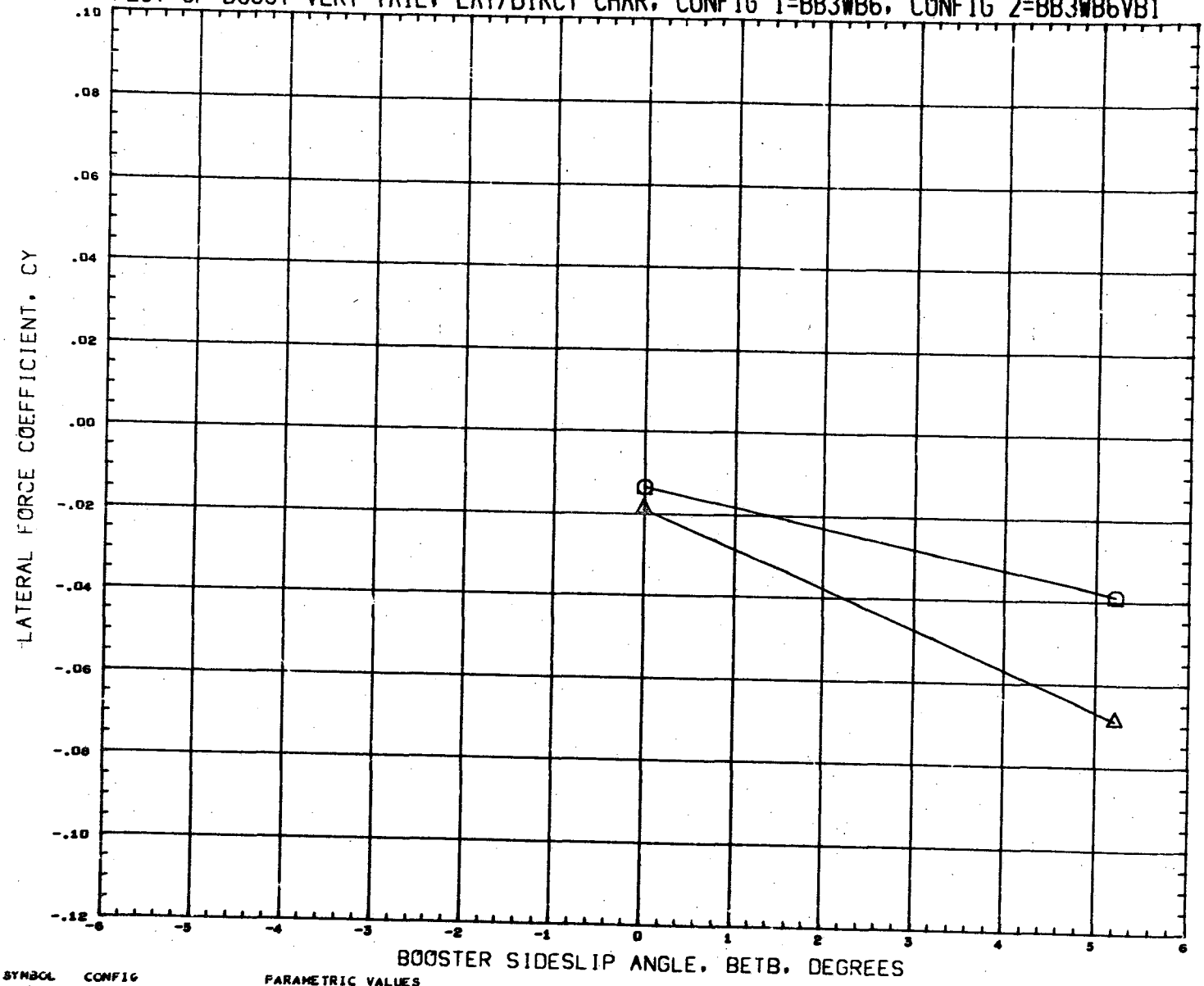
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000
ALPB	0.098	MACH	1.100

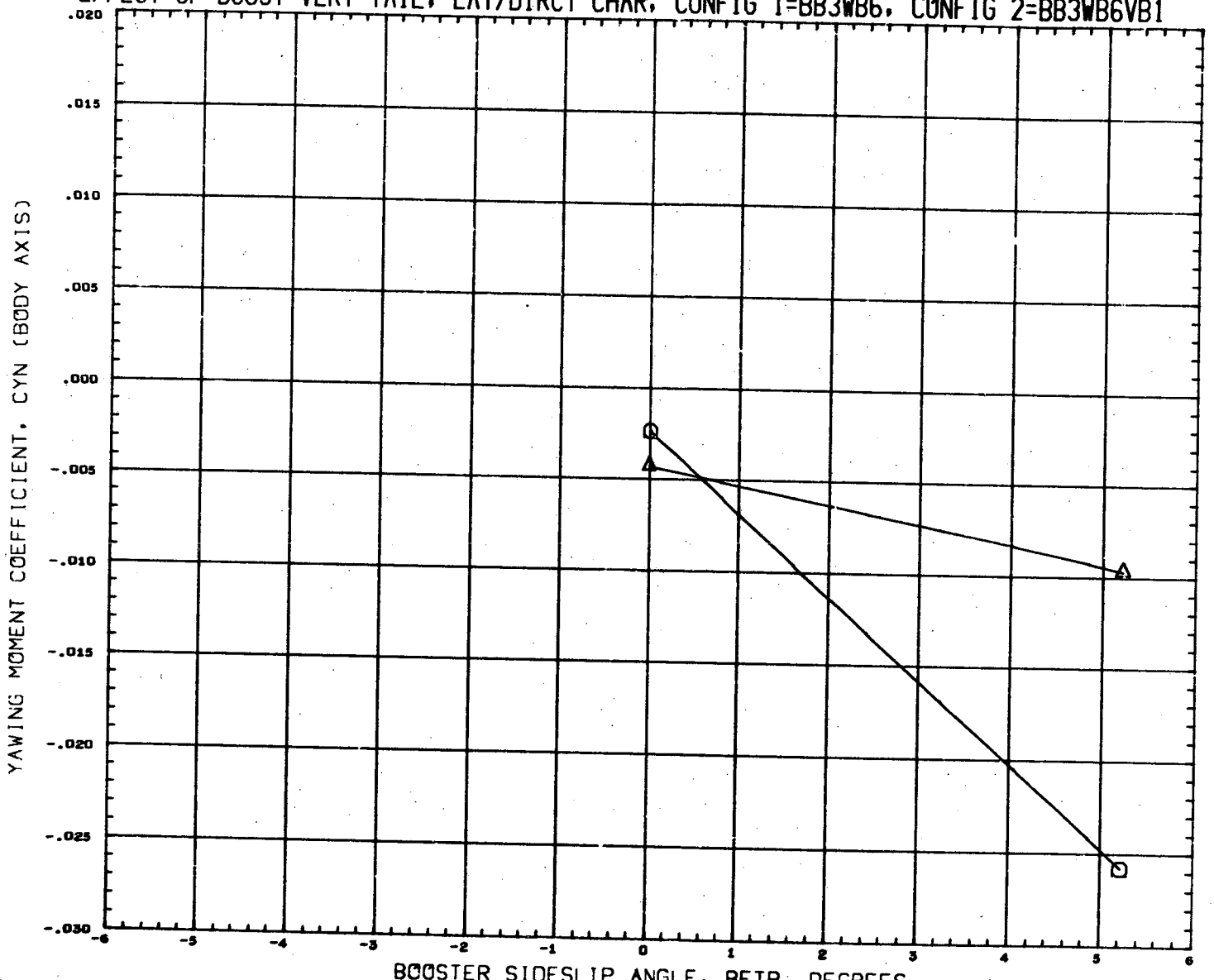
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA MIST. CODE M

MSC S-3C BOOSTER BB3WB6 ALONE (NCU082) 29 JUL 71 PAGE 325

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000
ALPB	0.098	MACH	1.100

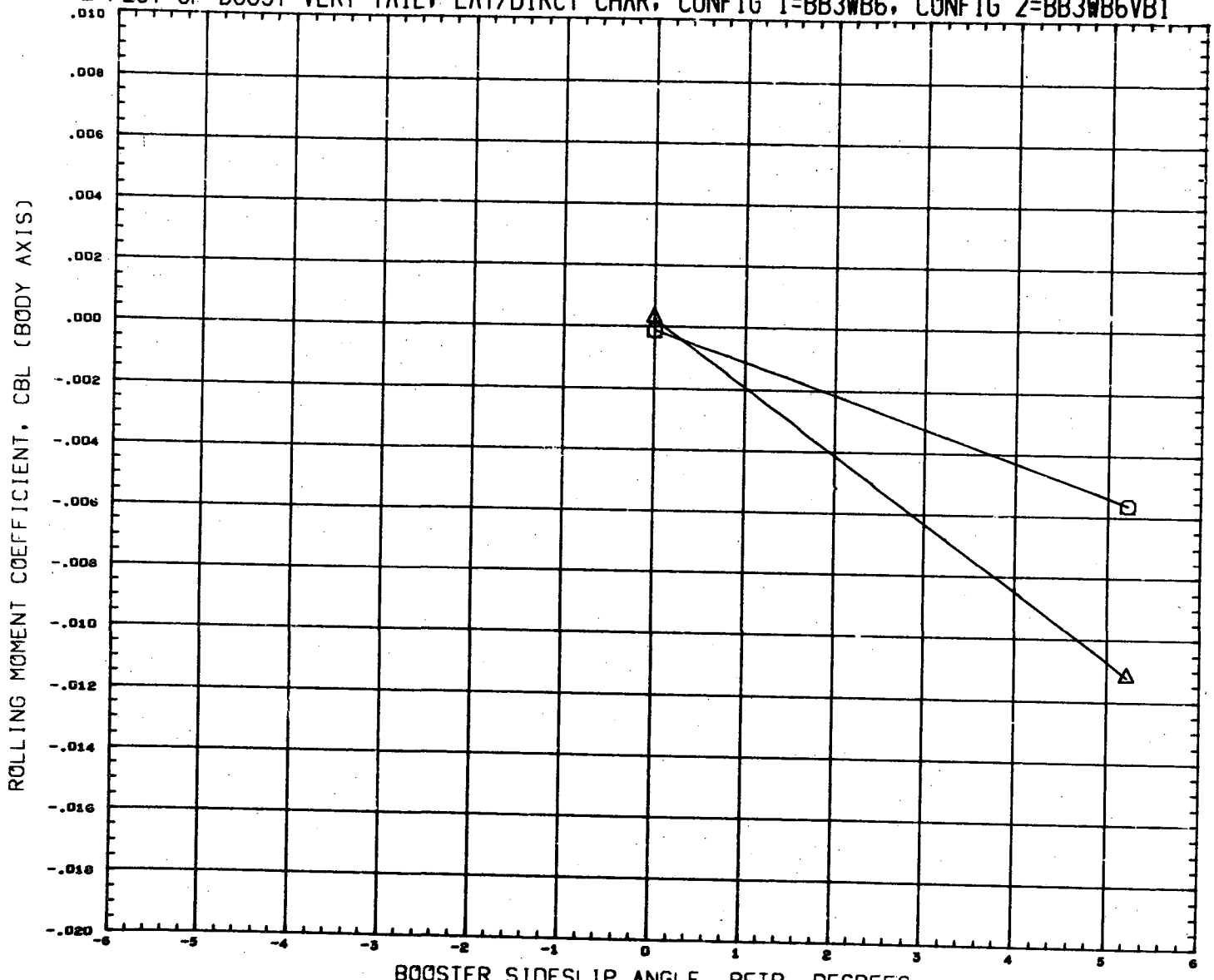
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3745	IN
XMRP	15.8930	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE (NCU082) 29 JUL 71 PAGE 326

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000	
ALPB	0.098	MACH	1.100	

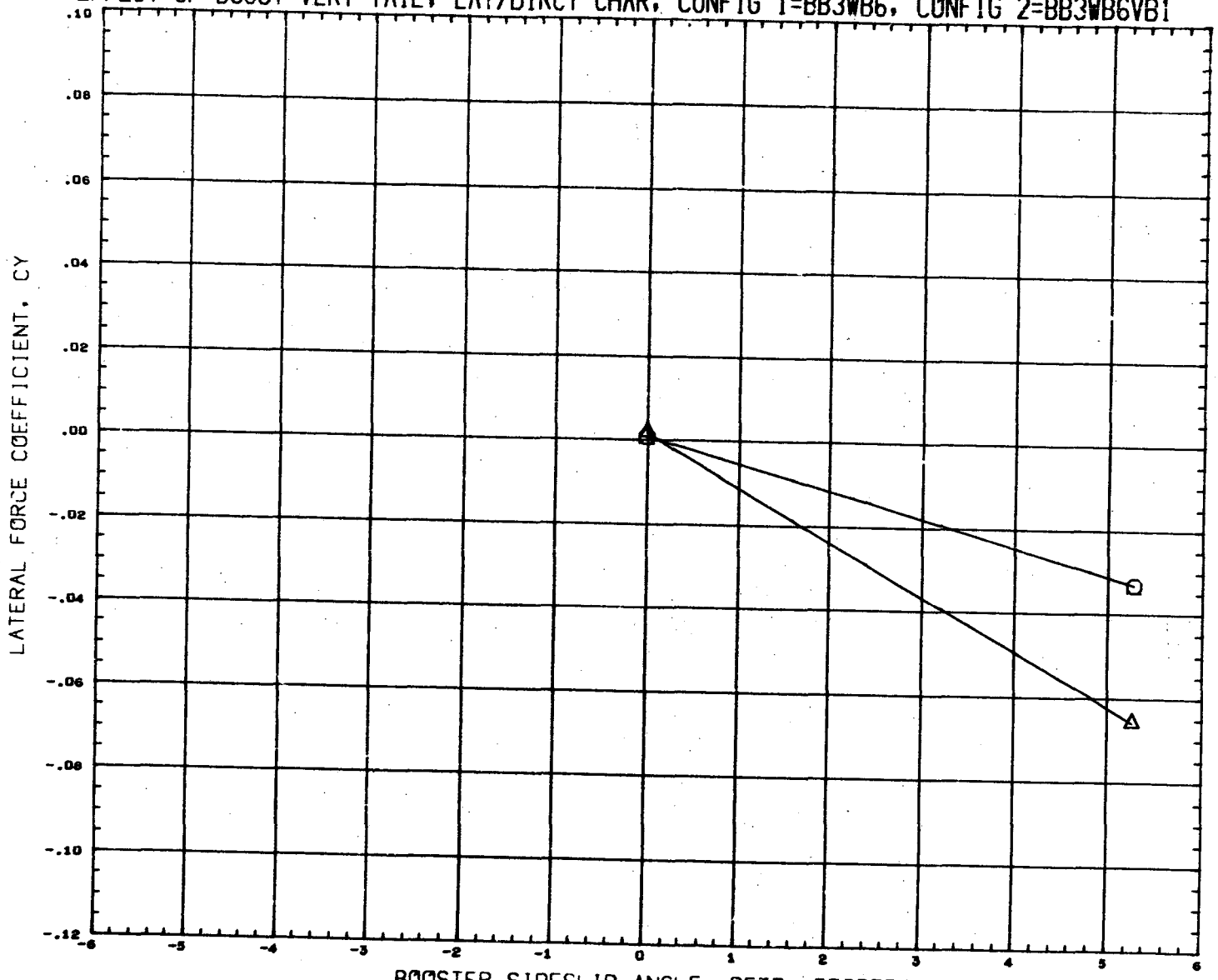
REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE H

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG		PARAMETRIC VALUES		
○	1.000	SEPPOS	0.016	ALPHA	0.000
△	2.000	ALFB	0.012	MACH	1.380

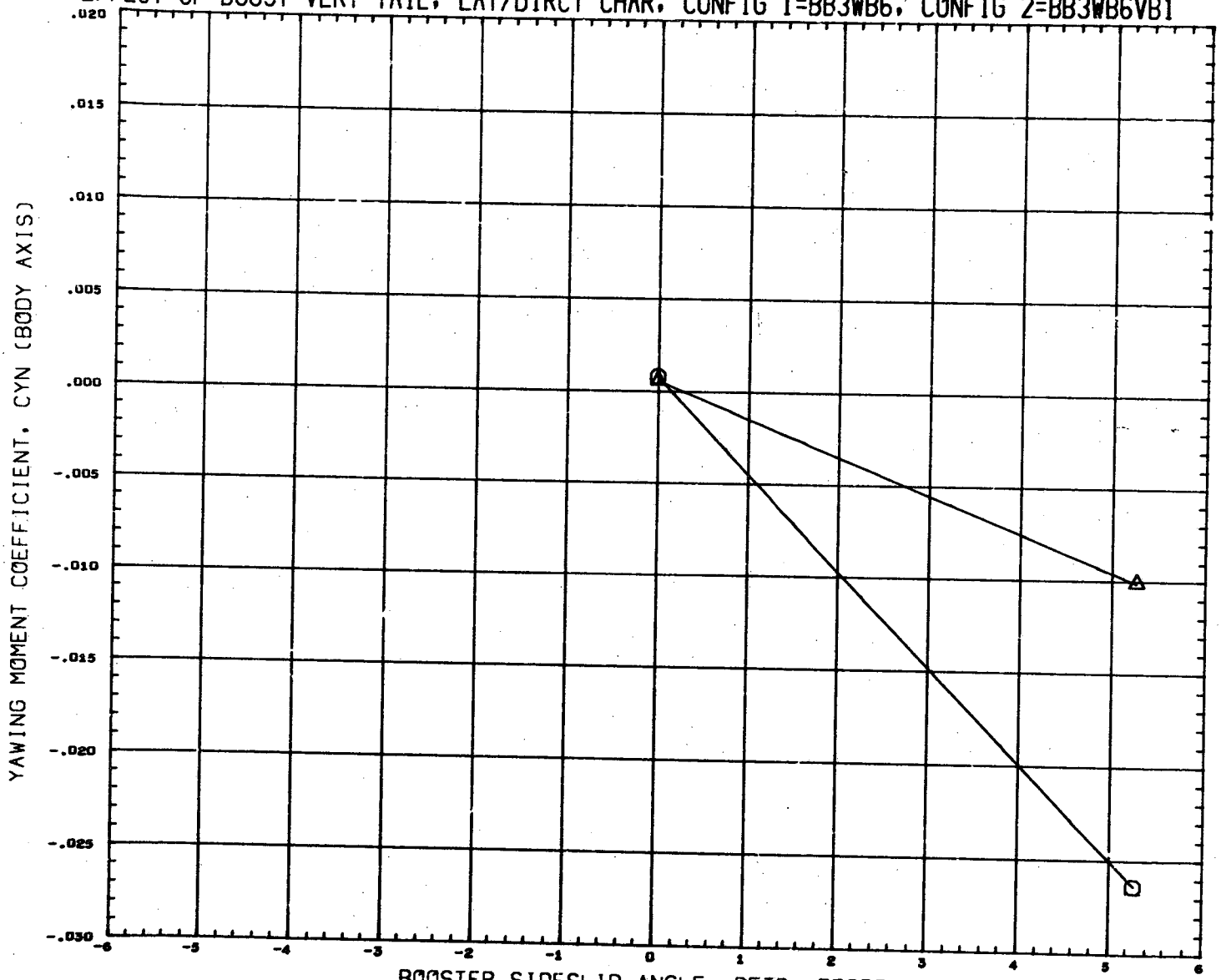
REFERENCE INFORMATION

SREF	196.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8999	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG		PARAMETRIC VALUES		
○	1.000	SEPPOS	0.016	ALPHA	0.000
△	2.000	ALPB	0.012	MACH	1.380

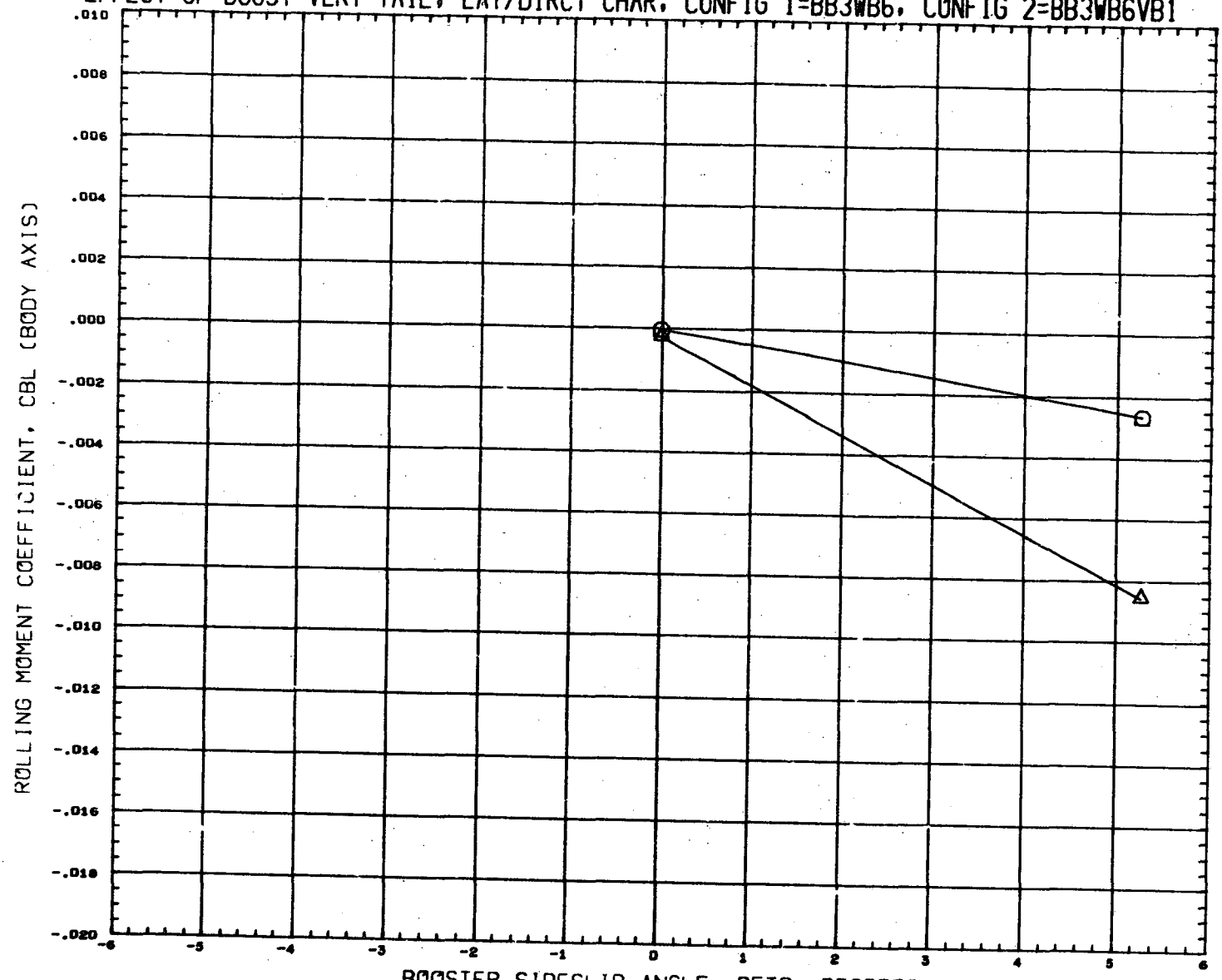
DATA MIST. CODE H

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0080	

MSC S-30 BOOSTER BB3WB6 ALONE

EFFECT OF BOOST VERT TAIL, LAT/DIRCT CHAR, CONFIG 1=BB3WB6, CONFIG 2=BB3WB6VB1



SYMBOL	CONFIG
○	1.000
△	2.000

PARAMETRIC VALUES

SEPPOS	0.016	ALPHA	0.000	
ALPB	0.012	MACH	1.300	

REFERENCE INFORMATION

SREF	106.8460	SQ IN
LREF	9.5400	IN
BREF	13.3740	IN
XMRP	15.8990	IN
YMRP	0.0000	IN
ZMRP	2.0000	IN
SCALE	0.0088	

DATA HIST. CODE M

MSC S-30 BOOSTER BB3WB6 ALONE